



SEQUENCE LISTING

110> Gudas, Jean M.
Haak-Frendscho, Mary
Foord, Orit
Liang, Meina L.
Ahluwalia, Kiran
Bhakta, Sunil

<120> ANTIBODIES DIRECTED TO MONOCYTE CHEMO-ATTRACTANT PROTEIN-1 (MCP-1) AND USES THEREOF

<130> ABXAZ.001A

<140> 10/644,277
<141> 2003-08-19

<150> 60/404,802
<151> 2002-08-19

<160> 150

<170> FastSEQ for Windows Version 4.0

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<211> 1335
<212> DNA
<213> Homosapien

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cctggaaatg ggcttgagtg gatggggaggt tttgatcctg aagatggta gacaatctac 180
gcacagaggt tccagggcag agtcgtcatg accgaggacc catctacaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccaacgag 300
tttggagtg gttatTTGA ctactgggc cagggAACCC tggtcaccgt ctccctcagcc 360
tccaccaagg gcccattcggt ctTCCCCTG gcGCCCTGCT ccaggagcac ctccgagagc 420
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcggtg 480
aactcaggcg ctctgaccag cggcgTgcac accttccccg ctgtccTaca gtcctcaga 540
ctctactccc tcagcagcgt ggtgaccgtg ccTCCcAGCA acttcggcac ccagacactac 600
acctgcaacg tagatcacaa gcccAGCAAC accaaggTGG acaagacagt tgagcgcAAA 660
tgttgtgtcg agtgcCcCacc gTgcccAGCA ccacCTGTGG caggaccgtc agtcttcctc 720
ttccccccaa aacccaaagga caccctcatg atctccccgg aCCCTGAGGT cacgtgcgtg 780
gtggtgacg tgagccacga agacCCCGAG gTCCAGTCA actggtaCgt ggacggcgtg 840
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gtcagcgTcc tcaccgttgt gCACCAggAC tgctgaacg gcaaggagta caagtgcAAg 960
gtctccaaaca aaggcctccc agCCCCCATC gagaaaACCA tctccAAAC caaaggcgcag 1020
ccccgagaac cacagggtga caccctggcc ccatCCCGGG aggagatgac caagaaccag 1080
gtcagcctga cctgcctgggt caaaggcttc taccccAGCG acatcgccgt ggagtggag 1140
agcaatgggc agccggagaa caactacaag accacacCTC ccatgtggA ctccgacgGC 1200
tccttcttcc tctacagcaa gtcaccgtg gacaagagca ggtggcagca ggggaacgtc 1260
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<210> 2

<211> 445
<212> PRT
<213> Homosapien

<400> 2
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1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Asn Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Arg Phe
50 55 60
Gln Gly Arg Val Val Met Thr Glu Asp Pro Ser Thr Asp Thr Ala Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Thr Asn Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
100 105 110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115 120 125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130 135 140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145 150 155 160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165 170 175
Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser
180 185 190
Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro
195 200 205
Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu
210 215 220
Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu
225 230 235 240
Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
245 250 255
Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln
260 265 270
Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
275 280 285
Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu
290 295 300
Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
305 310 315 320
Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
325 330 335
Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser
340 345 350
Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
355 360 365
Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
370 375 380
Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly
385 390 395 400
Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
405 410 415

Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn
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His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys			
435						440						445			

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<211> 660
<212> DNA
<213> Homosapien

<400> 3
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tggtaccaggc agaaaaccagg acagcctcct aaactgctca ttactgggc atctatccgg 180
gaatccgggg tcccgtgaccg attcagtcc agcggtctg agacagattt cacttcacc 240
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttttagtagt 300
ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tcccgcacatc tcatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420
ctgctgata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacccctc 480
caatcggtt actcccgagga gagtgtcaca gagcaggaca gcaaggacag cacctacagc 540
ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaaagt ctacccctgc 600
gaagtcaccc atcaggccct gagctcgccc gtcacaaaaga gcttcaacag gggagagtgt 660

<210> 4
<211> 220
<212> PRT
<213> Homosapien

<400> 4
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Met Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Ser Ser Gly Ser Glu Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95
Tyr Phe Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
100 105 110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
145 150 155 160
Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
165 170 175
Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
180 185 190
Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
195 200 205

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215 220

<210> 5
<211> 475
<212> DNA
<213> Homosapien

<400> 5
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcagg ttccggata caccctact gaattatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgagt gatgggaggt tttgatcctg aagatggta aacaatctac 180
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attattgtgc aaccaacgaa 300
ttttggagtg gttattttga ctactgggc cagggAACCC tggtcaccgt ctccctcagcc 360
tccaccaagg gccccatcggt ctccccctg gcccctgct ccaggagcac tacttcccc 420
ggcgtgcaca cttcccaagg tggcctacag tcctcaggac tctactccct cagca 475

<210> 6
<211> 158
<212> PRT
<213> Homosapien

<400> 6
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Thr Asn Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
100 105 110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115 120 125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Thr Ser Pro Gly Val His Thr
130 135 140
Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
145 150 155

<210> 7
<211> 477
<212> DNA
<213> Homosapien

<400> 7
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atcaattgca agtccagcca gagtgttta tatacgcca acaataagaa ctacttagtt 120
tggtaccagc agaaactagg acagccccct aagctgctca ttactgggc atctacccgg 180
gaatccgggg tccctgacc acctcaatggc agcgggtctg ggacagattt cactctcacc 240

atcagcagcc tgcaggctga agatgtggca gtttattact gtcaacaata ttatcgtagt 300
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tcccgcacatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcc 477

<210> 8
<211> 159
<212> PRT
<213> Homosapien

<400> 8
Asp Ile Val Met Thr Gln Ser Pro Ala Ser Leu Ala Glu Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Leu Gly Gln
35 40 45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95
Tyr Tyr Arg Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
100 105 110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
145 150 155

<210> 9
<211> 556
<212> PRT
<213> Homosapien

<400> 9
Cys Ala Gly Gly Thr Cys Cys Ala Gly Cys Thr Gly Gly Thr Ala Cys
1 5 10 15
Ala Gly Thr Cys Thr Gly Gly Gly Cys Thr Gly Ala Gly Gly Thr
20 25 30
Gly Ala Ala Gly Ala Ala Gly Cys Cys Thr Gly Gly Gly Cys Cys
35 40 45
Thr Cys Ala Gly Thr Gly Ala Ala Gly Gly Thr Cys Thr Cys Cys Thr
50 55 60
Gly Cys Ala Ala Gly Gly Thr Thr Cys Cys Gly Gly Ala Thr Ala
65 70 75 80
Cys Ala Cys Cys Cys Thr Cys Ala Cys Thr Gly Ala Ala Thr Thr Ala
85 90 95
Thr Cys Cys Ala Thr Gly Cys Ala Cys Thr Gly Gly Gly Thr Gly Cys
100 105 110
Gly Ala Cys Ala Gly Gly Cys Thr Cys Cys Thr Gly Gly Ala Ala Ala
115 120 125
Ala Gly Gly Gly Cys Thr Thr Gly Ala Gly Thr Gly Gly Ala Thr Gly
130 135 140

Gly Gly Ala Gly Gly Thr Thr Thr Gly Ala Thr Cys Cys Thr Gly
 145 150 155 160
 Ala Ala Gly Ala Thr Gly Gly Thr Gly Ala Ala Ala Cys Ala Ala Thr
 165 170 175
 Cys Thr Ala Cys Gly Cys Ala Cys Ala Gly Ala Ala Gly Thr Thr Cys
 180 185 190
 Cys Ala Gly Gly Cys Ala Gly Ala Gly Thr Cys Ala Cys Cys Ala
 195 200 205
 Thr Gly Ala Cys Cys Gly Ala Gly Gly Ala Cys Ala Cys Ala Thr Cys
 210 215 220
 Thr Ala Cys Ala Gly Ala Cys Ala Gly Cys Cys Thr Ala Cys
 225 230 235 240
 Ala Thr Gly Ala Gly Cys Thr Gly Ala Gly Cys Ala Gly Cys Cys
 245 250 255
 Thr Gly Ala Gly Ala Thr Cys Thr Gly Ala Gly Gly Ala Cys Ala Cys
 260 265 270
 Gly Gly Cys Cys Gly Thr Gly Thr Ala Thr Ala Cys Thr Gly Thr
 275 280 285
 Gly Cys Ala Ala Cys Ala Ala Cys Gly Ala Thr Thr Thr Thr Thr
 290 295 300
 Gly Gly Ala Gly Thr Gly Gly Thr Ala Thr Thr Ala Thr Ala Ala
 305 310 315 320
 Cys Thr Ala Cys Thr Gly Gly Gly Cys Cys Ala Gly Gly Ala
 325 330 335
 Ala Cys Cys Cys Thr Gly Gly Thr Cys Ala Cys Cys Gly Thr Cys Thr
 340 345 350
 Cys Cys Thr Cys Ala Gly Cys Cys Thr Cys Cys Ala Cys Cys Ala Ala
 355 360 365
 Gly Gly Gly Cys Cys Ala Thr Cys Gly Gly Thr Cys Thr Thr Cys
 370 375 380
 Cys Cys Cys Cys Thr Gly Gly Cys Cys Cys Cys Thr Gly Cys Thr
 385 390 395 400
 Cys Cys Ala Gly Ala Gly Cys Ala Cys Cys Thr Cys Cys Gly Ala
 405 410 415
 Gly Ala Gly Cys Ala Cys Ala Gly Cys Gly Gly Cys Cys Cys Thr Gly
 420 425 430
 Gly Gly Cys Thr Gly Cys Cys Thr Gly Gly Thr Cys Ala Ala Gly Gly
 435 440 445
 Ala Cys Thr Ala Cys Thr Thr Cys Cys Cys Gly Ala Ala Cys Cys
 450 455 460
 Gly Gly Thr Gly Ala Cys Gly Gly Thr Gly Thr Cys Gly Thr Gly Gly
 465 470 475 480
 Ala Ala Cys Thr Cys Ala Gly Gly Cys Gly Cys Thr Cys Thr Gly Ala
 485 490 495
 Cys Cys Ala Gly Cys Gly Gly Cys Gly Thr Gly Cys Ala Cys Ala Cys
 500 505 510
 Cys Thr Thr Cys Cys Cys Ala Gly Cys Thr Gly Thr Cys Cys Thr Ala
 515 520 525
 Cys Ala Gly Thr Cys Cys Thr Cys Ala Gly Gly Ala Cys Thr Cys Thr
 530 535 540
 Ala Cys Thr Cys Cys Cys Thr Cys Ala Gly Cys Ala
 545 550 555

<210> 10
 <211> 185
 <212> PRT

<213> Homosapien

<400> 10
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
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Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Tyr Asn Tyr Trp Gly Gln Gly
100 105 110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115 120 125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130 135 140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145 150 155 160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165 170 175
Gln Ser Ser Gly Leu Tyr Ser Leu Ser
180 185

<210> 11

<211> 490

<212> DNA

<213> Homosapien

<400> 11

gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggcgaa gagggccacc 60
atcaactgca agtccagcca gagtgttta tacagctcca acaaataagaa ctacttagtt 120
tggtaccaac agaaaaccagg acagcctcct aaactgctca tttaactgggc atctatccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcaacagcc tgcaggctga agatgtggca gtttattact gtcagcagta tttttatagt 300
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc ttttgtgtgc 420
ctgctgaata acttcttatcc cagagaggcc aaagtacagt ggaagggtgaa taaccccctc 480
caatcggtta 490

<210> 12

<211> 163

<212> PRT

<213> Homosapien

<400> 12

Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
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Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45

Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val
 50 55 60
 Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Asn Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95
 Tyr Phe Tyr Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100 105 110
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
 115 120 125
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 130 135 140
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 145 150 155 160
 Gln Ser Gly

<210> 13
 <211> 543
 <212> DNA
 <213> Homosapien

<400> 13
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 tcctgcagg tttccggaca caccctcaact gaattatcca tgcactgggt gcgacaggct 120
 cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgtga aacaatctac 180
 gcacagaagt tccaggacac agtcaccatg accgaggaca catctacaga cacaggctac 240
 atggagctga gcagcctaag atctgaggac acggccgtgt attactgtgc aaccaacgat 300
 ttttggagtg gttattttga ctgctggggc cagggAACCC tggtcaccgt ctccctcagcc 360
 tccaccaagg gcccattcggt ctccccctg ggcgcctgct ccaggagcac ctccgagagc 420
 acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480
 aactcaggcg ctctgaccag cggcgtgcac accttccccag ctgtcctaca gtcctcagga 540
 ctt 543

<210> 14
 <211> 181
 <212> PRT
 <213> Homosapien

<400> 14
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Val Ser Gly His Thr Leu Thr Glu Leu
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Phe Asp Pro Glu Asp Asp Glu Thr Ile Tyr Ala Gln Lys Phe
 50 55 60
 Gln Asp Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Cys Trp Gly Gln Gly
 100 105 110
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
 115 120 125

Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu
130					135					140					
Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp
145					150					155					160
Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu
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Gln	Ser	Ser	Gly	Leu											
					180										

<210> 15
<211> 490
<212> DNA
<213> Homosapien

<400> 15
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tggtaccaggc agagaccagg acagcctcct aagctgctca ttactgggc atctacccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatagtagt 300
ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tcccgcacatc tgatgagcag ttgaaatctg gaactgcctc ttttgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacccctc 480
caatcggta 490

<210> 16
<211> 163
<212> PRT
<213> Homosapien

<400> 16
Asp Ile Val Leu Thr Gln Ser Pro Asp Ser Leu Ala Val Cys Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30
Pro Asn Asn Lys Asn Phe Leu Val Trp Tyr Gln Gln Arg Pro Gly Gln
35 40 45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95
Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
100 105 110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
145 150 155 160
Gln Ser Gly

<210> 17

<211> 1335
<212> DNA
<213> Homosapien

<400> 17

caggtccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcaagg ttcccgata caccctacta gaattatcca tgcactgggt gcacaggct 120
cctggaaaag ggcttgagt gatgggaggt tttgatctg aagatggta aacaatctac 180
gcacagaagt tccaggccag agtcaccatg accgaggaca catctacaga cacagtctac 240
atggagctga gcagcctgag atctgaggac acggccatgt attactgtgc aacacggag 300
ttttggactg gttatccatc ccactgggc caggaaacc tggtcaccgt ctccctcagcc 360
tccaccaagg gcccatttgt ctccccctg gccccttgt ccaggagcac ctccgagac 420
acagcggccc tgggctgct ggtcaaggac tacttccccg aaccgggtac ggtgtcgtgg 480
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540
ctctactccc tcagcagcgt ggtgaccgtg ccctccagca acttcggcac ccagacactac 600
acctgcaacg tagatcacaa gcccagcaac accaagggtg acaagacagt tgagcgc当地 660
tgttgtgtcg agtgcaccgc gtgcccagca ccacctgtgg caggaccgtc agtcttcctc 720
ttccccccaa aacccaagga caccctcatg atctcccgaa cccctgaggt cacgtgcgtg 780
gtggggacg tgagccacga agaccccgag gtccagttca actggtagtgg ggacggcgtg 840
gagggtcata atgccaagac aaagccacgg gaggagcgt tcaacacgac gttccgtgtg 900
gtcagcgtcc tcaccgttgt gcaccaggac tggctgaacg gcaaggagta caagtgc当地 960
gtctccaaca aaggcctccc agccccatc gagaaaacca tctccaaaac caaaggc当地 1020
ccccgagaac cacaggtgta caccctgccc ccattccggg aggagatgac caagaaccag 1080
gtcagcctga cctgccttgtt caaaggcttc taccccaagcg acatgcgcgt ggagtggag 1140
agcaatgggc agccggagaa caactacaag accacacctc ccattgtggg ctccgacggc 1200
tccttcttcc tctacagcaa gctcaccgtg gacaagagca ggtggcagca ggggaacgtc 1260
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ctgtctccgg gtaaa 1335

<210> 18
<211> 445
<212> PRT
<213> Homosapien

<400> 18

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Val Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys
85 90 95
Ala Thr Arg Glu Phe Trp Thr Gly Tyr Phe Asp His Trp Gly Gln Gly
100 105 110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115 120 125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130 135 140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145 150 155 160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165 170 175

Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Val Pro Ser
 180 185 190
 Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro
 195 200 205
 Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu
 210 215 220
 Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu
 225 230 235 240
 Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
 245 250 255
 Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln
 260 265 270
 Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
 275 280 285
 Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu
 290 295 300
 Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
 305 310 315 320
 Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
 325 330 335
 Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser
 340 345 350
 Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
 355 360 365
 Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
 370 375 380
 Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly
 385 390 395 400
 Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
 405 410 415
 Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
 420 425 430
 His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 435 440 445

<210> 19
 <211> 660
 <212> DNA
 <213> Homosapien

<400> 19
 gacatcgtga tgacctcagtc tccagactcc ctggctgtgt ctctggcgaa gagggccacc 60
 atcaactgca agtccagcca gagtgtttta tacagctcca acaataagaa ctacttagtt 120
 tggtatcagc agaaaccagg acagcctcct aaactgctca ttactgggc atctatccgg 180
 gaatccgggg tcccggaccg attcagtggc agcgggtctg ggacagattt cacttcacc 240
 atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatagtact 300
 ccgctcaatt tcggcggagg gaccaaggtg gagatcaaac gaactgtggc tgcaccatct 360
 gtcttcatct tcccggccatc tcatgtggc ttgaaatctg gaactgcctc ttttgtgtgc 420
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgg taacgccctc 480
 caatcgggta actcccgagga gagtgtcaca gagcaggaca gcaaggacag cacctacagc 540
 ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaaagt ctacgcctgc 600
 gaagtccaccc atcaggccct gagctcgcccc gtcacaaaaga gttcaacag gggagagtgt 660

<210> 20
 <211> 220

<212> PRT
<213> Homosapien

<400> 20
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95
Tyr Tyr Ser Thr Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile
100 105 110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
145 150 155 160
Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
165 170 175
Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
180 185 190
Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
195 200 205
Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215 220

<210> 21
<211> 543
<212> DNA
<213> Homosapien

<400> 21
caggtccagc tggtagtgc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcaagg ttcccgata cactttact gaattatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatggta aacaagctac 180
gcacagaagt tccggggcag agtcaccatg accgaggaca catctacaga cacagccac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccaacgtat 300
ttttggagtg gttatttga ctattggggc cagggAACCC tggtcaccgt ctcctcagcc 360
tccaccaagg gcccattcggt ctccccctg gcccctgct ccaggagcac ctccgagagc 420
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540
ctt 543

<210> 22
<211> 181
<212> PRT
<213> Homosapien

<400> 22

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Phe Thr Glu Leu
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ser Tyr Ala Gln Lys Phe
 50 55 60
 Arg Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala His
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
 100 105 110
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
 115 120 125
 Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
 130 135 140
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
 145 150 155 160
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
 165 170 175
 Gln Ser Ser Gly Leu
 180

<210> 23
 <211> 460
 <212> DNA
 <213> Homosapien

<400> 23
 gacatccaga tgacccagtc tccatcttcc gtgtctgcat ctgttaggaga cagagtcacc 60
 atcaacttgtc gggcgagtca gggatttgac atctacttag cctggtatca gcagaaaacca 120
 gggaaagccc ctaagctctt gatcaatgct gcatccagtt tgcaaaaacgg ggtccctca 180
 aggttcggcg gcagtggatc tgggacagat ttcactctca ccatcagcgg cctgcagcct 240
 gaagattttg caacttacta ttgtcaactg acttacttt tcccgtggac gttcgccaa 300
 gggaccaagg tggaaatcaa acgaactgtg gctgcaccat ctgtcttcat cttccggcca 360
 tctgatgagc agttgaaatc tggaaactgcc tctgttgtgt gcctgctgaa taacttctat 420
 cccagagagg ccaaagtaca gtgaaaggtg gataacgccc 460

<210> 24
 <211> 153
 <212> PRT
 <213> Homosapien

<400> 24
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Asp Ile Tyr
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Asn Ala Ala Ser Ser Leu Gln Asn Gly Val Pro Ser Arg Phe Gly Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Gly Leu Gln Pro
 65 70 75 80

Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Gln	Leu	Thr	Tyr	Phe	Phe	Pro	Trp
				85					90					95	
Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala
				100				105			110				
Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly
				115				120			125				
Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala
				130				135			140				
Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala							
				145				150							

<210> 25
<211> 543
<212> DNA
<213> Homosapien

<400> 25
caggccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcagg tttccggata caccctcaact gaattatcca tgcactgggt gcgacgaaatt 120
cctggaaaag ggcttgagtg gatgggaggt tttgaccctg aagatggta aacaatctac 180
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacaaacat 300
ttttggagtg gctattgggg ccactggggc cagggAACCC tggcacccgt ctcctcagcc 360
tccaccaagg gcccattcggt cttccccctg gcgcctgtgt ccaggagcac ctccgagagc 420
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480
aactcaggcg ctctgaccag cgccgtgcac accttcccag ctgtcctaca gtcctcagga 540
ctt 543

<210> 26
<211> 181
<212> PRT
<213> Homosapien

<400> 26
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
20 25 30
Ser Met His Trp Val Arg Arg Ile Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Trp Gly His Trp Gly Gln Gly
100 105 110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115 120 125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130 135 140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145 150 155 160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165 170 175

Gln Ser Ser Gly Leu
180

<210> 27
<211> 459
<212> DNA
<213> Homosapien

<400> 27
gacatcgta tgaccaggc tccagactcc ctggctgtgt ctctggcgaa gagggccacc 60
atcaactgca agtccaggcca gagtgttta tacagctcca acaataagaa ctacctagct 120
tggtaccaag ctgctcattt actggacata tatccggaa tccggggtcc ctgaccgatt 180
cagtggcagc gggctctggaa cagatttcac tctcaccatc agcagcctgc aggctgaaga 240
tgtggcagtt tattactgtc aggaacatta tagtattccg tggacgttcc gccaaggac 300
caaggtggaa atcaaacgaa ctgtggctgc accatctgtc ttcatcttcc cgccatctga 360
tgagcagttg aactgcctct gttgtgtgcc tgctgaataa cttctatccc agagaggcca 420
aagtacagtg gaaggtggat aacgcctcc aatcggtt 459

<210> 28
<211> 149
<212> PRT
<213> Homosapien

<400> 28
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Leu Leu Ile Tyr Trp Thr
35 40 45
Tyr Ile Arg Glu Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser
50 55 60
Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val
65 70 75 80
Ala Val Tyr Tyr Cys Gln Glu His Tyr Ser Ile Pro Trp Thr Phe Gly
85 90 95
Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val
100 105 110
Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Asn Cys Leu Cys Cys Val
115 120 125
Pro Ala Glu Leu Leu Ser Gln Arg Gly Gln Ser Thr Val Glu Gly Gly
130 135 140
Arg Pro Pro Ile Gly
145

<210> 29
<211> 524
<212> DNA
<213> Homosapien

<400> 29
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcaagg ttccggata caccctactt gaattatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgatgt gatgggaggt tttgatcctg aagatgtga aacaatctac 180
gcacagaagt tccaggccagc agtcaccatc accgaggaca catctacaga cacggcctac 240

atggagctga gcagcctgag atctgaggac acggccgtgt atttctgtgc aaccaacgat 300
ttttggagtg gttatttga ctgtggac cagggAACCC tggtcaccgt ctccctcagcc 360
tccaccaagg gccccatcggt cttcccccctg gccccctgct ccaggaacac ctccgagagc 420
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480
aactcaggcg ctctgaccag cggcgtgcac accttcccg ctgt 524

<210> 30
<211> 174
<212> PRT
<213> Homosapien

<400> 30
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Asp Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
85 90 95
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Cys Trp Asp Gln Gly
100 105 110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115 120 125
Pro Leu Ala Pro Cys Ser Arg Asn Thr Ser Glu Ser Thr Ala Ala Leu
130 135 140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145 150 155 160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170

<210> 31
<211> 490
<212> DNA
<213> Homosapien

<400> 31
gacatcgtga tgacccagtc tccagactcc ctggctgcgt ctctgggcga gaggcccacc 60
atcaactgca agtccagtc gagtgttta tacaggtcca acaaataagaa ttatttagtt 120
tggtaccagc aaaaaccagg acagcctcct aagctgctca ttactgggc atctatccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cacttcacc 240
atcagcagcc tgcaggctga agatgtggca gtttatttct gtcagcaata ttatagttct 300
ccgtggacgt ttggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taaccccctc 480
caatcgggta 490

<210> 32
<211> 163
<212> PRT
<213> Homosapien

<400> 32
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Ala Ser Leu Gly
 1 5 10 15
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Arg
 20 25 30
 Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val
 50 55 60
 Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Phe Cys Gln Gln
 85 90 95
 Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100 105 110
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
 115 120 125
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 130 135 140
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 145 150 155 160
 Gln Ser Gly

<210> 33
 <211> 545
 <212> DNA
 <213> Homosapien

<400> 33
 caggtccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
 tcctgcagg tttccggata cacccacta gaattatcca tgcactgggt gcgacaggct 120
 cctggaaaag ggcttgagt gatgggaggt tttgatctg aagatggta aacaatctac 180
 gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacctggtat 300
 agtggatct acttagctt tgatatctgg ggccaaggga caatggtcac cgtctttca 360
 gcctccacca agggcccattc ggtttcccc ctggcgcctc gctccaggag cacctccgag 420
 agcacagcgg ccctgggtg cctggtaag gactactcc cccaaccggg gacggtgtcg 480
 tggaactcag gcgctctgac cagcggcgtg cacacccctc cagctgtcct acagtcctca 540
 ggatt 545

<210> 34
 <211> 181
 <212> PRT
 <213> Homosapien

<400> 34
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr

65	70	75	80												
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
		85						90							95
Ala	Thr	Trp	Tyr	Ser	Gly	Ile	Tyr	Leu	Ala	Phe	Asp	Ile	Trp	Gly	Gln
		100						105							110
Gly	Thr	Met	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val
		115						120							125
Phe	Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala
		130					135				140				
Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser
		145			150				155						160
Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val
		165						170							175
Leu	Gln	Ser	Ser	Gly											
		180													

<210> 35
<211> 472
<212> DNA
<213> Homosapien

<400> 35															
gaaattgtgc	tgactcagtc	tccagacttt	cagtctgtga	ctccaaagga	gaaagtccacc	60									
atcacctgcc	gggccagtc	gagcatttgtt	agtagcttac	actggatcca	gcagaaaacca	120									
gatcagtctc	caaagctcct	catcaagttat	gcttcccagt	ccttctcagg	ggtcccctcg	180									
aggttcagtg	gcagtggttc	tggacagat	ttcacccctca	ccatcaatag	cctgaaagct	240									
gaagatgctg	caacgttatta	ctgtcatcag	agtagtagtt	tacctcacac	tttcggcgga	300									
gggaccaagg	tggagatcaa	acgaaactgtg	gctgcaccat	ctgtcttcat	tttcccgcca	360									
tctgatgagc	agttgaaatc	tggaaactgcc	tctgttgtgt	gctgctgaa	taacttctat	420									
cccagagagg	ccaaagtaca	gtgaaaggtg	gataaccccc	tccaatcggt	ta	472									

<210> 36
<211> 157
<212> PRT
<213> Homosapien

<400> 36															
Glu	Ile	Val	Leu	Thr	Gln	Ser	Pro	Asp	Phe	Gln	Ser	Val	Thr	Pro	Lys
1					5				10						15
Glu	Lys	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Ser	Ile	Gly	Ser	Ser
		20						25							30
Leu	His	Trp	Tyr	Gln	Gln	Lys	Pro	Asp	Gln	Ser	Pro	Lys	Leu	Leu	Ile
		35						40							45
Lys	Tyr	Ala	Ser	Gln	Ser	Phe	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
		50						55							60
Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Asn	Ser	Leu	Glu	Ala
		65						70							80
Glu	Asp	Ala	Ala	Thr	Tyr	Tyr	Cys	His	Gln	Ser	Ser	Ser	Leu	Pro	His
		85						90							95
Thr	Phe	Gly	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala	
		100						105							110
Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly
		115						120							125
Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala
		130						135							140
Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly			

145

150

155

<210> 37
<211> 1335
<212> DNA
<213> Homosapien

<400> 37
cagggtccagt tggtagtacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcgaaagg ttcccgata caccctcaact gaattatcca tgcaactgggt gcgacagggc 120
cctggaaaag gggttgagtg gatgggaggt ttgtatcctg aagatgtga aacaatctac 180
gcacagaagt tccagggcag agtcagttatg accgaggaca catccacaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt atttctgtgc aaccaacgaa 300
ttttggagtg gtttattttga ctactggggc cagggAACCC tggtcaccgt ctccctcagcc 360
tccaccaagg gcccattcggt ctccccctg gcgcctgct ccaggagcac ctccgagagc 420
acagcggccc tgggtgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcggtg 480
aactcaggcg ctctgaccag cggcgtcaca accttcccag ctgtccctaca gtcctcagga 540
ctctactccc tcagcagcgt ggtgaccgtg ccctccagca acttcggcac ccagacctac 600
acctgcaacg tagatcacaa gcccagcaac accaagggtgg acaagacagt tgagcgcaa 660
tgttgtgtcg agtgcacc cgtcccgacca gtcggccagca ccacctgtgg caggaccgtc agtcttcctc 720
ttccccccaa aacccaagga caccctcatg atctcccgga cccctgagggt cacgtcggtg 780
gtggtgacg tgagccacga gagcccgag gtcctgttca actggtaactgt ggacggcggtg 840
gaggtgcata atgccaagac aaagccacgg gaggagcagt tcaacagcac gttccgtgtg 900
gtcagcggtcc tcaccgttgt gcaccaggac tggctgaacg gcaaggagta caagtgc当地 960
gtctccaaca aaggcctccc agccccatc gagaAAAACCA tctccaaaac caaaggggcag 1020
cccccgagaaac cacaggtgtt caccctgtccc ccattccccggg aggagatgac caagaaccag 1080
gtcagcctga cctgcctgggt caaaggcttc taaccccgacgc acatcgccgt ggagtggag 1140
agcaatgggc agccggagaa caactacaag accacacccctc ccatgctgga ctccgacgac 1200
tccttcttcc tctacagcaa gtcaccgtg gacaagagca ggtggcagca ggggaacgtc 1260
ttctcatgtt ccgtgatgca tgaggctctg cacaaccact acacgcagaa gaggctctcc 1320
ctgtctccgg gtaaaa 1335

<210> 38
<211> 445
<212> PRT
<213> Homosapien

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<400> 38
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
      1           5                   10          15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
      20          25                   30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
      35          40                   45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
      50          55                   60
Gln Gly Arg Val Ser Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
      65          70                   75          80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
      85          90                   95
Ala Thr Asn Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
      100         105                  110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
      115         120                  125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
      130         135                  140

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Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
 145 150 155 160
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
 165 170 175
 Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser
 180 185 190
 Ser Asn Phe Gly Thr Gln Thr Tyr Cys Asn Val Asp His Lys Pro
 195 200 205
 Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu
 210 215 220
 Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu
 225 230 235 240
 Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
 245 250 255
 Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln
 260 265 270
 Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
 275 280 285
 Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu
 290 295 300
 Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
 305 310 315 320
 Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
 325 330 335
 Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser
 340 345 350
 Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
 355 360 365
 Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
 370 375 380
 Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly
 385 390 395 400
 Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
 405 410 415
 Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
 420 425 430
 His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 435 440 445

<210> 39
 <211> 660
 <212> DNA
 <213> Homosapien

<400> 39
 gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggcgaa gagggccacc 60
 atcaactgca agtccagcca gagtgttta tacagctcca acaaataagaaa ctatttagtt 120
 tggtaccaggc agagaccagg acagcctccct aagctgctca ttactgggc atctaccgg 180
 gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cacttcacc 240
 atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata tttttattct 300
 ccgtggacgt tcggccaagg gaccaaggta gaaatcaaac gaactgtggc tgcaccatct 360
 gtcttcatct tcccgcacatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacccctc 480
 caatcgggta actcccagga gagtgtcaca gaggcaggaca gcaaggacag cacctacagc 540
 ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaaagt ctacgcctgc 600
 gaagtcaacc atcaggccct gagctcgccc gtcacaaaga gcttcaacag gggagagtgt 660

<210> 40
<211> 220
<212> PRT
<213> Homosapien

<400> 40
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Arg Pro Gly Gln
35 40 45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95
Tyr Phe Tyr Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
100 105 110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
145 150 155 160
Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
165 170 175
Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
180 185 190
Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
195 200 205
Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215 220

<210> 41
<211> 556
<212> DNA
<213> Homosapien

<400> 41
caggccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcagg tttccggaca cattttcaact gaattatcca tacactgggt gcgacaggct 120
cctggaaaag ggctcgagt gatgggaggt tttgatcctg aagatggta aacaatctac 180
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagtctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccaacgat 300
ttttggagt gttatttga ctactggggc cagggAACCC tggtcaccgt ctcctcagcc 360
tccaccaagg gccccatcggt cttccccctg gcccctgtt ccaggagcac ctccgagagc 420
acagcggccc tgggctgcct ggtcaaggac tactccccg aaccggtgac ggtgtcggtgg 480
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540
ctctactccc tcagca 556

<210> 42
<211> 185

<212> PRT

<213> Homosapien

<400> 42

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly His Ile Phe Thr Glu Leu
20 25 30
Ser Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Val Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
100 105 110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115 120 125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130 135 140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145 150 155 160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165 170 175
Gln Ser Ser Gly Leu Tyr Ser Leu Ser
180 185

<210> 43

<211> 490

<212> DNA

<213> Homosapien

<400> 43

gacatcgtga tgacccagtc tccaggctcc ctggctgtgt ctctggcgaa gaggcccacc 60
atcaactgca agtccagcca gagtatTTTA ttcaGGTCCA acaaATAAGAA ctatttaACT 120
tggTaccAGC agaaACCAGG acaggCTCTT aaactGCTCA tttaCTGGGc atctatCCGG 180
gaatCCGGGG tccCTGATCG attcAGTGGC aGCGGGTCTG ggtCAAATTt cactCTCAC 240
atcaccAGCC tgcAGGCTGA agatGTGGCA atttATTACT gTCAGCAATA ttatAGTAGT 300
ccgtGGACGT tcggCCAAGG gaccaAGGTG gaaatCAAAC gaactGTGGC tgcACCATCT 360
gtcttcatCT tcccGCCATC tgatGAGCAG ttgaaATCTG gaactGCCTC tggTGTGTGc 420
ctgCTGAATA acttCTATCC cagAGAGGCC aaagtACAGT ggaAGGtGGA taacGCCCTC 480
caatCGGta 490

<210> 44

<211> 163

<212> PRT

<213> Homosapien

<400> 44

Asp Ile Val Met Thr Gln Ser Pro Gly Ser Leu Ala Val Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Ile Leu Phe Arg
20 25 30
Ser Asn Asn Lys Asn Tyr Leu Thr Trp Tyr Gln Gln Lys Pro Gly Gln

35	40	45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val		
50	55	60
Pro Asp Arg Phe Ser Gly Ser Gly Ser Asn Phe Thr Leu Thr		
65	70	75
Ile Thr Ser Leu Gln Ala Glu Asp Val Ala Ile Tyr Tyr Cys Gln Gln		
85	90	95
Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile		
100	105	110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp		
115	120	125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn		
130	135	140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu		
145	150	155
Gln Ser Gly		160

<210> 45
<211> 559
<212> DNA
<213> Homosapien

<400> 45
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcagg ttccggata caccctact gaattatcca tgcactgggt ggcacaggct 120
cctggaaaag ggcttgagt gatggggaggt tttgatcctg aagatggta aacaatcaac 180
gcacagaagt tccaggcag agtcaccatg accgaggaca catctacaga cacaggctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagatcct 300
ggtggatata gtggctactt tgaccactgg ggccaggaa ccctggtcac cgtctcccta 360
gcctccacca agggcccatc ggtttcccc ctggcgccct gctccaggag cacctccgag 420
agcacacgccc ccctgggctg cctggtaag gactacttcc ccgaaccgggt gacgggtgtcg 480
tggaaacttag ggcgtctgac cagcggcgtg cacaccttcc cagctgtcct acagtcctca 540
ggactctact ccctcagca 559

<210> 46
<211> 186
<212> PRT
<213> Homosapien

<400> 46
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Asn Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Gly Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Thr Asp Pro Gly Gly Tyr Ser Gly Tyr Phe Asp His Trp Gly Gln
100 105 110
Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val

	115	120	125												
Phe	Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala
130					135						140				
Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser
145					150					155					160
Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val
					165				170					175	
Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser						
					180				185						

<210> 47
<211> 464
<212> DNA
<213> Homosapien

<400> 47
gacatcgtga tgacccagtc tccagatttc ctggctgtgt ctctggcgaa gaggcccacc 60
atcaactgca agtccagcca gagtgaaaa tacagctcca acaataagaa ctacttagtt 120
tggtaccaggc agaaaaccgg acagcctcct aagctgctcc ttactgggc atctaccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatagttct 300
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaacc gaactgtggc tgcaccatct 360
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaa 464

<210> 48
<211> 154
<212> PRT
<213> Homosapien

<400> 48
Asp Ile Val Met Thr Gln Ser Pro Asp Phe Leu Ala Val Ser Leu Gly
1 5 10 15
Glu Arg Pro Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Phe Tyr Ser
20 25 30
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45
Pro Pro Lys Leu Leu Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95
Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
100 105 110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp
145 150

<210> 49
<211> 476
<212> DNA

<213> Homosapien

<400> 49

caggtccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcagg tttccggata caccctact gaattatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgagt gatgggaggt tttgatctg aagatgtga aacaatctac 180
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaca cacaggctac 240
atggaaactga gcagcctgag atctgaggac acggccgtgt attactgtgc aacacacgat 300
ttttggagtg cttatTTTA ctactggggc cagggAACCC tggtcaccgt ctccctcagct 360
tccaccaagg gcccattcgt cttccccctg gcccctgtc ccaggagcac ctccgagagc 420
acagccgccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtc 476

<210> 50

<211> 158

<212> PRT

<213> Homosapien

<400> 50

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Asp Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr His Thr Ala Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Thr His Asp Phe Trp Ser Ala Tyr Phe Tyr Tyr Trp Gly Gln Gly
100 105 110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115 120 125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130 135 140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155

<210> 51

<211> 490

<212> DNA

<213> Homosapien

<400> 51

gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggcgaa gagggccacc 60
atcaactgca agtccagcca gagtgtttta tacggctcca acaataagag ctacttagct 120
tggtaccagc agaaaccagg acagcctcct aagctgctca ttactgggc atctacccgg 180
gaatccgggg tccctgaccg attcagtgcc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctgc agatgtggca gtttattact gtcagcaaca ttatagtact 300
ccgtgcagtt ttggccaggc gaccaaactg gagatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tggtgtgc 420
ctgtgtataata ctttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgccctc 480
caatcgggta 490

<210> 52

<211> 163
<212> PRT
<213> Homosapien

<400> 52
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Gly
20 25 30
Ser Asn Asn Lys Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Ser Ser Leu Gln Ala Ala Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95
His Tyr Ser Thr Pro Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile
100 105 110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
145 150 155 160
Gln Ser Gly

<210> 53
<211> 550
<212> DNA
<213> Homosapien

<400> 53
cagggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgtcaagg cttctggata caccccccggctactatc tgcaactgggt gcgacaggcc 120
cctggacaag ggcttgagtg gatgggatgg atcaaccctt acaatgtatgg cacaactat 180
gcacagaagt ttcaggccag ggtcaccatg accaggacca cgtccatca gacaggctac 240
atggagctga gcaggctgag atctgacgc acggccgtt attactgtgc gagagatata 300
gccgcagctg gagccgtcta ctttgactac tggggccagg gaaccctggt caccgtctcc 360
tcagcttcca ccaaggcccc atccgtcttc cccctggcgc cctgctccag gagcacctcc 420
gagagcacag ccgcctggg ctgcctggc aaggactact ttccccgaac cggtgacggt 480
gtcgttggaa tcaggcgccc tgaccagcgg cgtgcacacc ttcccgctg tcctacagtc 540
ctcaggactt 550

<210> 54
<211> 183
<212> PRT
<213> Homosapien

<400> 54
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr
20 25 30
Tyr Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

35	40	45
Gly Trp Ile Asn Pro Tyr Asn Asp Gly Thr Asn Tyr Ala Gln Lys Phe		
50	55	60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr		
65	70	75
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys		
85	90	95
Ala Arg Asp Ile Ala Ala Gly Ala Val Tyr Phe Asp Tyr Trp Gly		
100	105	110
Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser		
115	120	125
Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala		
130	135	140
Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Arg Thr Gly Asp Gly		
145	150	155
Val Val Glu Leu Arg Arg Pro Asp Gln Arg Arg Ala His Leu Pro Gly		
165	170	175
Cys Pro Thr Val Leu Arg Thr		
180		

<210> 55
<211> 458
<212> DNA
<213> Homosapien

<400> 55
gacatccaga tgacctcagtc tccatccctcc ctgtctgcatt ctgttaggaga cagagtcacc 60
atcaacttgccc aggcgagtca ggacattacc acctatttaa attggtatca gcagaaaccca 120
gggaaaagcccc ctaagctccct gatctacgat gcatccaatt tggaaacagg ggtcccatca 180
aggttcagtg gaagtggatc tggacagat ttactttca ccatcagcag cctgcagcct 240
gaagatattt caacatatta ctgtcaacaa tatgataatc tcccgatcac cttcggccaa 300
gggacacgac tggagattaa acgaactgtg gctgcaccat ctgtcttcat cttccggcca 360
tctgtatgagc agttgaaatc tggaaactgcc tctgttgtgt gcctgctgaa taacttctat 420
cccaagagagg ccaaagtaca gggaaagggtgg ataacgcc 458

<210> 56
<211> 152
<212> PRT
<213> Homosapien

<400> 56
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Asp Ile Thr Thr Tyr
20 25 30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45
Tyr Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly
50 55 60
Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln Pro
65 70 75 80
Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Asp Asn Leu Pro Ile
85 90 95
Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg Thr Val Ala Ala
100 105 110
Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly

115	120	125
Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala		
130	135	140
Lys Val Gln Gly Arg Trp Ile Thr		
145	150	

<210> 57
<211> 571
<212> DNA
<213> Homosapien

<400> 57
caggtccagc tggcacatgc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcagg ttccggata caccctact gaattatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgagtg gatggggaggt tttgatctg aagatggtga aacaatctac 180
gcacagaagt tccaggccag agtcatgtat accgaggaca catctacaga cacagccttc 240
atggacactga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagacgat 300
atgtgaccc ctcactacct ctacttcgtt atggacgtct ggggccaagg gaccacggtc 360
accgtctcct cagcttcac caagggccca tccgtttcc ccttggcgcc ctgctccagg 420
agcacctccg agagcacagc cgccctgggc tgcctgtca aggactactt ccccgaaaccg 480
gtgacggtgtt cgtggaaactc aggcccctg accagcggcg tgcacacctt cccggctgtc 540
ctacagtctt caggactcta ctccctcagc a 571

<210> 58
<211> 190
<212> PRT
<213> Homosapien

<400> 58
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Met Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Phe
65 70 75 80
Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Thr Asp Asp Met Leu Thr Pro His Tyr Leu Tyr Phe Gly Met Asp
100 105 110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys
115 120 125
Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu
130 135 140
Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro
145 150 155 160
Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr
165 170 175
Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
180 185 190

<210> 59

<211> 458
<212> DNA
<213> Homosapien

<400> 59
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgttaggaga cagagtcacc 60
atcacttgcc gggcaagtca gggcattaga aatgattag gctggtatca gcagaaacca 120
gggaaagccc ctaagcgccct gatctatgct acatccagtt tgc当地tgg ggtcccatca 180
aggtcagcg gc当地ggatc tggacagaa tt当地acttca caatcagcag cctgcagcct 240
gaagatttg caacttatta ctgtctacag cataatactt acccattcac tt当地ggccct 300
gggaccaaag tggatataca acgaaactgtg gctgcaccat ctgtcttcat ct当地ccgcca 360
tctgtatgac agt当地gaaatc tggaaactgtc tctgttgtt gctgctgaa taacttctat 420
ccc当地gaggc ccaaagttaca gt当地gagggtg gataacgc 458

<210> 60
<211> 152
<212> PRT
<213> Homosapien

<400> 60
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
20 25 30
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
35 40 45
Tyr Ala Thr Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Thr Tyr Pro Phe
85 90 95
Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Arg Thr Val Ala Ala
100 105 110
Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
115 120 125
Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
130 135 140
Lys Val Gln Trp Lys Val Asp Asn
145 150

<210> 61
<211> 1338
<212> DNA
<213> Homosapien

<400> 61
caggtgcagc tgcaggagtc gggcccagga ctggtaaagc cttcacagac cctgtccctc 60
acctgcactg tctcagggtgg ctccatcagc agtggggta actactggaa ctggatccgc 120
cagcaccagg ggaaggccct ggagtggtt gggtacatct attacagtgg aaacacccat 180
tacaaccgtt ccctcaagag tc当地attacc atatcaatag acacgtctaa gaaccaggatc 240
tccctgaccc tgagctctgt gactgcccgg gacacggccg tggattactg tgc当地gagat 300
ggtggagacg atgctttga tatctggggc caaggacaa tggtaaccgt ctcttcagct 360
tccaccaagg gcccatccgt ct当地ccctgt gcccccgtt ccaggagcac ctccgagagc 420
acagccgccc tgggctgctt ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480
aactcaggcg ccctgaccag cggcgtgcac accttcccgg ctgtccttaca gtcctcagg 540

ctctactccc tcagcagcgt ggtgaccgtg ccctccagca gcttgggcac gaagacctac 600
 acctgcAACG tagatcacaa gcccAGCAAC accaAGGTGG acaAGAGAGT tgagtccaaa 660
 tatggtcccc catGCCATC atGCCAGCA CCTGAGTTCC tggggggacc atcAGTCTTC 720
 ctgtccccca caaaACCCAA ggacACTCTC atgatCTCCC ggACCCCTGA ggtcacGTGC 780
 gtgtggTGG acgtgagCCA ggaAGACCCC gaggtccAGT tcaactGGTA cgtggatGGC 840
 gtggaggTGC ataATGCCA gacaAGCCG CGGGAGGAGC agttcaACAG cacgtaccGT 900
 gtggtcAGCG tcctCACCGT CCTGCACCAg gactGGCTGA acggcaAGGA gtacaAGTGC 960
 aaggTCTCCA acaaAGGCTC CCCGTCTCC atcgagaaaa ccATCTCCAA agccaAAAGGG 1020
 cagccccGAG agccACAGGT gtacACCCTG CCCCCATCCC aggAGGAGAT gaccaAGAAC 1080
 caggTcAGCC tgacCTGCCT ggtCAAAGGC ttctACCCCA gCgACATCGC cgtggagtGG 1140
 gagagcaATG ggcAGCCGA gaacaACTAC aagaccACGC CTCCCCTGCT ggactCCGAC 1200
 ggctcTTCT tcctCTACAG caggCTAACc gtggacaAGA gcaggTGGCA ggaggGGAAT 1260
 gtctCTCAT gctccGTGAT gcatgaggCT ctgcacaACC actacacACa gaagAGCCTC 1320
 tccctgtCTC tggtaaa 1338

<210> 62
 <211> 446
 <212> PRT
 <213> Homosapien

<400> 62

Gln	Val	Gln	Leu	Gln	Glu	Ser	Gly	Pro	Gly	Leu	Val	Lys	Pro	Ser	Gln
1					5			10				15			
Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser	Gly	Gly	Ser	Ile	Ser	Ser	Gly
					20			25				30			
Gly	Asn	Tyr	Trp	Asn	Trp	Ile	Arg	Gln	His	Pro	Gly	Lys	Gly	Leu	Glu
					35			40			45				
Trp	Ile	Gly	Tyr	Ile	Tyr	Tyr	Ser	Gly	Asn	Thr	Tyr	Tyr	Asn	Pro	Ser
					50			55			60				
Leu	Lys	Ser	Arg	Ile	Thr	Ile	Ser	Ile	Asp	Thr	Ser	Lys	Asn	Gln	Phe
	65					70			75			80			
Ser	Leu	Thr	Leu	Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr
					85			90			95				
Cys	Ala	Arg	Asp	Gly	Gly	Asp	Asp	Ala	Phe	Asp	Ile	Trp	Gly	Gln	Gly
					100			105			110				
Thr	Met	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe
					115			120			125				
Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu
					130			135			140				
Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp
	145					150			155			160			
Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu
					165			170			175				
Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser
					180			185			190				
Ser	Ser	Leu	Gly	Thr	Lys	Thr	Tyr	Thr	Cys	Asn	Val	Asp	His	Lys	Pro
					195			200			205				
Ser	Asn	Thr	Lys	Val	Asp	Lys	Arg	Val	Glu	Ser	Lys	Tyr	Gly	Pro	Pro
					210			215			220				
Cys	Pro	Ser	Cys	Pro	Ala	Pro	Glu	Phe	Leu	Gly	Gly	Pro	Ser	Val	Phe
	225					230			235			240			
Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro
						245			250			255			
Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	Gln	Glu	Asp	Pro	Glu	Val
					260			265			270				
Gln	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr
					275			280			285				

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
 290 295 300
 Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
 305 310 315 320
 Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
 325 330 335
 Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
 340 345 350
 Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
 355 360 365
 Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
 370 375 380
 Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
 385 390 395 400
 Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
 405 410 415
 Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
 420 425 430
 Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
 435 440 445

<210> 63
 <211> 642
 <212> DNA
 <213> Homosapien

<400> 63
 gacatccaga tgacctcgtc tccatccctcc ctgtctgcat ctgttaggaga cagagtacc 60
 atcaacttgcc aggcgagtc ggacatttgc aactattaa attggtatca gcagaaaccca 120
 gggaaaagccc ctaaactcct gatctacgtat gcatccaatt tgaaaacagg ggtcccatca 180
 aggttcagtg gaagtggatc tggacagat tttacttca ccatcaacag cctgcagcct 240
 gaagatatttgc caacatatta ctgtcaagaa tataataatc tcccgtagac ttttggccag 300
 gggaccaagt tggagatcaa acgaactgtg gctgcaccat ctgtcttcat cttccggcca 360
 tctgatgagc agttgaaatc tggaaactgcc tctgttgtgt gcctgctgaa taacttctat 420
 cccagagagg ccaaagtaca gtgaaagggtg gataacgccc tccaatcggtt taactcccg 480
 gagagtgtca cagagcagga cagaaggac agcacctaca gcctcagcag caccctgacg 540
 ctgagcaaag cagactacga gaaacacaaa gtctacgcct gctaagtcac ccatcaggc 600
 ctgagctcgc ccgtcacaaa gagttcaac aggggagagt gt 642

<210> 64
 <211> 214
 <212> PRT
 <213> Homosapien

<400> 64
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Asp Ile Ser Asn Tyr
 20 25 30
 Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Asn Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Glu Tyr Asn Asn Leu Pro Tyr

85	90	95
Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg Thr Val Ala Ala		
100	105	110
Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly		
115	120	125
Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala		
130	135	140
Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln		
145	150	155
Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser		
165	170	175
Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr		
180	185	190
Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser		
195	200	205
Phe Asn Arg Gly Glu Cys		
210		

<210> 65
<211> 1341
<212> DNA
<213> Homosapien

<400> 65

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caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgcaggc 60
tcctgcaagg ttccggaga caccctact gaattatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgagt gatgggaggt tttgatctg aagatggta aacaatctac 180
gcacggaaatg tccaggccag agtcaccatg accgaggaca catctacaga cacagttac 240
atggagctga gcagcctgag atctgaggac acggccgtgt atttctgtgc aacagattca 300
cgtggatata gtggctactt tgacaactgg gcccaggaa ccctggtcac cgtctcc 360
gcttccacca agggcccatc cgtttcccc ctggcgccct gtcggaggac cacctccgag 420
agcacagccg ccctgggctg cctggtaag gactacttcc ccgaaccgggt gacgggtgtcg 480
tggaacttag cgcgcctgac cagcggcgtg cacaccccttcc cgctgtccct acagtcc 540
ggactctact ccctcagcag cgtggtgacc gtgccctcca gcagcttggg cacgaagacc 600
tacacctgca acgttagatca caagcccagc aacaccaagg tgacaagag agttgagtcc 660
aaatatggtc ccccatgccc atcatgccc gcacctgagt tcctgggggg accatcagtc 720
ttcctgttcc ccccaaaaacc caaggacact ctcatgatct cccggacccc tgaggtcacg 780
tgcgtggtag tggacgtgag ccaggaagac cccgagggtcc agttcaactg gtacgtggat 840
ggcgtggagg tgcataatgc caagacaaag ccgcgggagg agcagttcaa cagcacgtac 900
cgtgtggta gcgtcctcac cgtcctgac caggactggc tgaacggcaa ggagtacaag 960
tgcaaggctc ccaacaaagg cctccctgtcc tccatcgaga aaaccatctc caaagccaaa 1020
ggcagcccc gagagccaca ggtgtacacc ctgccccat cccaggagga gatgaccaag 1080
aaccaggta gcctgacctg cctggtaaaa ggcttctacc ccagcgcacat cggcgtggag 1140
tgggagagca atgggcagcc ggagaacaac tacaagacca cgcctcccgt gctggactcc 1200
gacggctct tcttcctcta cagcaggcta accgtggaca agagcaggta gcaggagggg 1260
aatgtcttct catgctccgt gatgcatgag gctctgcaca accactacac acagaagagc 1320
ctctccctgt ctctggtaa a 1341
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<210> 66
<211> 447
<212> PRT
<213> Homosapien

<400> 66

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala		
1	5	10
		15

Ser Val Gln Val Ser Cys Lys Val Ser Gly Asp Thr Leu Thr Glu Leu
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Arg Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Val Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
 85 90 95
 Ala Thr Asp Ser Arg Gly Tyr Ser Gly Tyr Phe Asp Asn Trp Gly Gln
 100 105 110
 Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
 115 120 125
 Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala
 130 135 140
 Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
 145 150 155 160
 Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
 165 170 175
 Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
 180 185 190
 Ser Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His Lys
 195 200 205
 Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro
 210 215 220
 Pro Cys Pro Ser Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val
 225 230 235 240
 Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr
 245 250 255
 Pro Glu Val Thr Cys Val Val Asp Val Ser Gln Glu Asp Pro Glu
 260 265 270
 Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys
 275 280 285
 Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser
 290 295 300
 Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys
 305 310 315 320
 Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile
 325 330 335
 Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro
 340 345 350
 Pro Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu
 355 360 365
 Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn
 370 375 380
 Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser
 385 390 395 400
 Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg
 405 410 415
 Trp Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu
 420 425 430
 His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
 435 440 445

<211> 660
 <212> DNA
 <213> Homosapien

 <400> 67
 gacatcgta tgacccagtc tccagactcc ctggctgtgt ctctggcga gagggccacc 60
 atcaactgca agtccagcca gagtgttta tacagctca acaataacaa ctacttagtt 120
 tggtaccagc agaaaccagg acgcctctt aaattgctca ttactggc atctacccgg 180
 gaattcgggg ttccctgaccg attcagtggc agcgggtctg ggacagattt cacttcacc 240
 atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttattttct 300
 ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360
 gtcttcatct tcccgcacatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacccctc 480
 caatcggta actcccagga gagtgtcaca gaggcagaca gcaaggacag cacctacagc 540
 ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaaagt ctacccctgc 600
 gaagtcaaccc atcaggccct gagctcgccc gtcacaaaga gcttcaacag gggagagtgt 660

<210> 68
 <211> 220
 <212> PRT
 <213> Homosapien

 <400> 68
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20 25 30
 Ser Asn Asn Asn Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Phe Gly Val
 50 55 60
 Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95
 Tyr Tyr Phe Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100 105 110
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
 115 120 125
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 130 135 140
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 145 150 155 160
 Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
 165 170 175
 Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
 180 185 190
 Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
 195 200 205
 Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 210 215 220

<210> 69
 <211> 556
 <212> DNA

<213> Homosapien

<400> 69

caggccatc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcagg tttccggata caccctact gatttatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgagt gatgggaggt tttgatctg aagatggta aacaatctac 180
gcacagaagt tccaggccag agtaccatg accgaggaca catcttcaga cacaggctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacccacgaa 300
ttttggagt gttatttga ctactggggc cagggAACCC tggtcaccgt ctccctcagct 360
tccaccaagg gcccattcgt ctccccctg gcgcctgtgt ccaggagcac ctccgagagc 420
acagccgccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480
aactcaggcg ccctgaccag cggcgtgcac accttcccg ctgtcctaca gtcctcagga 540
ctctactccc tcagca 556

<210> 70

<211> 185

<212> PRT

<213> Homosapien

<400> 70

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys, Lys Val Ser Gly Tyr Thr Leu Thr Asp Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Ser Asp Thr Ala Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Thr His Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
100 105 110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115 120 125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130 135 140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145 150 155 160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165 170 175
Gln Ser Ser Gly Leu Tyr Ser Leu Ser
180 185

<210> 71

<211> 476

<212> DNA

<213> Homosapien

<400> 71

gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
atcaactgca agtccagcca gagtgtttta tttagtccca acaataagag ctacttaact 120
tggtaccaggc agaaaccagg acagcctctt aaattactca ttttctgggc atctatccgg 180
gaatccgggg tccctgaccg aatcagtggc agcgggtctg ggacagatct cactctcacc 240
atcagcagcc tgcaggctga agatgcggca gtttattact gtcagcaata ttatagtagt 300

ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420
ctgtgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgc 476

<210> 72
<211> 158
<212> PRT
<213> Homosapien

<400> 72
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Phe Ser
20 25 30
Ser Asn Asn Lys Ser Tyr Leu Thr Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45
Pro Pro Lys Leu Leu Ile Phe Trp Ala Ser Ile Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Ile Ser Gly Ser Gly Thr Asp Leu Thr Leu Thr
65 70 75 80
Ile Ser Ser Leu Gln Ala Glu Asp Ala Ala Val Tyr Tyr Cys Gln Gln
85 90 95
Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
100 105 110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn
145 150 155

<210> 73
<211> 546
<212> DNA
<213> Homosapien

<400> 73
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcaagg tttccggata caccctcagt gaattatcca tgcactgggt gcgcacaggct 120
cctggaaaag ggcttgagtg gatggggaggt tttgatcctg aagatggta aataatccac 180
gcacagaagt tccaggcag agtcaccatg accgaggaca catctacaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtt attactgtgc aacaggcgat 300
ttttggagtg gttattacct tgactgggtgg ggccaggaa ccctggtcac cgtctccctca 360
gcttccacca agggcccatc cgtttcccc ctggcgccct gtcggaggag cacctccgag 420
agcacacagccg ccctgggctg cctggtaag gactactcc cccaaaccgggt gacgggtgtcg 480
tggaactcag gcgcctgac cagcggcgtg cacaccccttcc cggctgtcct acagtcctca 540
ggactt 546

<210> 74
<211> 182
<212> PRT
<213> Homosapien

<400> 74
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Ser Glu Leu
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Ile Ile His Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Thr Gly Asp Phe Trp Ser Gly Tyr Tyr Leu Asp Trp Trp Gly Gln
 100 105 110
 Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
 115 120 125
 Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala
 130 135 140
 Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
 145 150 155 160
 Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
 165 170 175
 Leu Gln Ser Ser Gly Leu
 180

<210> 75
 <211> 457
 <212> DNA
 <213> Homosapien

<400> 75
 gaaatagtga tgatgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
 ctctcctgca gggccagtc gagggttaac agcaacttag cctggtagcca gcagaaacct 120
 ggcaggctc ccaggctct catcaacggt gcatccacca gggccactgg catccagcc 180
 aggttcagtg gcagtgggtc tgggacagag ttcaccctca ccatcagcag cctgcagtct 240
 gaagattttg caatttatta ctgtcagcag tataatgact ggcttacgtt cacttcggc 300
 ggagggacca aggtggagat caatcgaact gtggctgcac catctgtctt catctcccc 360
 ccatctgatg agcagttgaa atctggaaact gcctctgttg tgtgcctgct gaataacttc 420
 tatcccagag aggccaaagt acagtggaa ggtggat 457

<210> 76
 <211> 152
 <212> PRT
 <213> Homosapien

<400> 76
 Glu Ile Val Met Met Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1 5 10 15
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Asn Ser Asn
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
 35 40 45
 Asn Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
 65 70 75 80
 Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Tyr Asn Asp Trp Pro Thr
 85 90 95

Phe Thr Phe Gly Gly Thr Lys Val Glu Ile Asn Arg Thr Val Ala
 100 105 110
 Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser
 115 120 125
 Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu
 130 135 140
 Ala Lys Val Gln Trp Glu Gly Gly
 145 150

<210> 77
 <211> 470
 <212> DNA
 <213> Homosapien

<400> 77
 caggccacgc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
 tcctgcagg tttccggata caccctcaact gaattatcca tgcactgggt gcgacaggct 120
 cctggaaaag ggcttgagtg gatggggaggt tttgatccctg aagatggtga aacaatgtac 180
 gcacagaagt tccaggccag agtcaccatg accgaggaca catctacaga cacagcctac 240
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccgacgat 300
 ttttggagtg gttatttga ctactggggc cagggAACCC tggtcaccgt ctccctcagcc 360
 tccaccaagg gccccatcggt ctccccctg gcgcctgtt ccaggagcac ctccgagagc 420
 acagcgcccc tgggctggct ggtcaaggac tactccccg aaccggcagg 470

<210> 78
 <211> 156
 <212> PRT
 <213> Homosapien

<400> 78
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Met Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Thr Asp Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
 100 105 110
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
 115 120 125
 Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
 130 135 140
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Ala
 145 150 155

<210> 79
 <211> 490
 <212> DNA
 <213> Homosapien

<400> 79

gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggacga gagggccacc 60
atcaactgca agtccagcca gagtgttta tacagtccta accaaaagaa ctacttagtt 120
tggtatcagc agaagccagg acagcctcct aagctgctcc ttactgggc atctatccgg 180
gaatccgggg tccctgaccc attcagtgcc agcgggtctg ggacagattt cacttcacc 240
atcagcagcc tgcaggctga agatgtggca gtttattact gtcacaaag ttattttact 300
ccgtggacgt tcggccaaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgccctc 480
caatcggtta 490

<210> 80

<211> 163

<212> PRT

<213> Homosapien

<400> 80

Asp	Ile	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu	Ala	Val	Ser	Leu	Asp
1			5					10					15		
Glu	Arg	Ala	Thr	Ile	Asn	Cys	Lys	Ser	Ser	Gln	Ser	Val	Leu	Tyr	Ser
				20				25					30		
Pro	Asn	Gln	Lys	Asn	Tyr	Leu	Val	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln
					35			40				45			
Pro	Pro	Lys	Leu	Leu	Tyr	Trp	Ala	Ser	Ile	Arg	Glu	Ser	Gly	Val	
					50			55			60				
Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr
					65			70			75			80	
Ile	Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln
					85			90				95			
Ser	Tyr	Phe	Thr	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile
					100			105				110			
Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp
					115			120			125				
Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn
					130			135			140				
Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu
					145			150			155			160	
Gln	Ser	Gly													

<210> 81

<211> 556

<212> DNA

<213> Homosapien

<400> 81

caggtccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcaagg tttccggata caccctcagt gaattatcca tgcactgggt ggcacaggct 120
cctggaaaag ggcttgatgt gatgggaggt tttgatccctg aagatgtatgaa aacaatctac 180
gcacagaagt tccaggccag agtcaccatg accgaggaca catctacaga cacagccttc 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccacatg 300
ttttggatgt gttatccatc ctactggggc cagggaaaccc tggtcaccgt ctccctcagct 360
tccaccaagg gcccattccgt ctccccctg ggcgcctgtgt ccaggagcac ctccgagagc 420
acagccgccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480
aactcaggcg ccctgaccac cgccgtgcac accttccccg ctgtcctaca gtcctcaggaa 540

ctctactccc tcagca

556

<210> 82

<211> 185

<212> PRT

<213> Homosapien

<400> 82

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Ser Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Asp Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Phe
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Thr His Asp Phe Trp Ser Gly Tyr Phe His Tyr Trp Gly Gln Gly
100 105 110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115 120 125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130 135 140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145 150 155 160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165 170 175
Gln Ser Ser Gly Leu Tyr Ser Leu Ser
180 185

<210> 83

<211> 476

<212> DNA

<213> Homosapien

<400> 83

gacatcgta tgacccagtc tccagactcc ctggctgtgt ctctggcgaa gagggccacc 60
atcaactgca agtccagcca gagtgttta tacagctccg acaataagag ctacttagtt 120
tggtaccaggc agaaaccagg acagcctcct aaggtgctca ttactgggc atctattcgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cacttcacc 240
atcagcagcc tgcaggctga agatgtggca gtattact gtcagcaata ttatactagt 300
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaacc gaaactgtggc tgcaccatct 360
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgaa taacgc 476

<210> 84

<211> 158

<212> PRT

<213> Homosapien

<400> 84

Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Glu	Arg	Ala	Thr	Ile	Asn	Cys	Lys	Ser	Ser	Gln	Ser	Val	Leu	Tyr	Ser
20							25						30		
Ser	Asp	Asn	Lys	Ser	Tyr	Leu	Val	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln
35							40					45			
Pro	Pro	Lys	Val	Leu	Ile	Tyr	Trp	Ala	Ser	Ile	Arg	Glu	Ser	Gly	Val
50							55				60				
Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr
65							70				75			80	
Ile	Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln
							85				90			95	
Tyr	Tyr	Thr	Ser	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile
							100				105			110	
Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp
							115				120			125	
Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn
							130				135			140	
Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn		
							145				150			155	

<210> 85
<211> 543
<212> DNA
<213> Homosapien

<400> 85
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgttaagg ttcccgata caccctact gaattatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgagt gatgggaggt tttgatccctg aagatggtga aacaatctac 180
gcacagaagt tccaggccag agtcaccatg accgaggaca catctacaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aatccacgag 300
ttttggagtg gttattttga ctactggggc cagggAACCC tggtcaccgt ctcttcagct 360
tccaccaagg gccccatccgt ctccccctg gcgcctgtct ccaggagcac ctccgagagc 420
acagccgccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480
aactcaggcg ccctgaccag cggcgtgcac accttccccg ctgtcctaca gtcctcagga 540
ctt 543

<210> 86
<211> 181
<212> PRT
<213> Homosapien

<400> 86
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Ile His Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
100 105 110

Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe
115					120					125					
Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu
130					135					140					
Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp
145					150				155					160	
Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu
					165			170					175		
Gln	Ser	Ser	Gly	Leu											
					180										

<210> 87
<211> 477
<212> DNA
<213> Homosapien

<400> 87
gacatcgtga tgacctcagtc tccagactcc ctggctgtgt ctctggcgca gagggccacc 60
atcaactgcata gttccaggcctt gagggtttta tacagctcca acaataagaa ctatttagtt 120
tggcacccatc agaaaccagg acaggccctt aagttgtctca ttactgggc atctacccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggccga agatgtggca gtttattact gtcagcaata ttatagttct 300
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcacccatct 360
gtcttcatct tcccgcacatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcc 477

<210> 88
<211> 159
<212> PRT
<213> Homosapien

<400> 88
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Leu Ser Val Leu Tyr Ser
20 25 30
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Leu Gln Lys Pro Gly Gln
35 40 45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95
Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
100 105 110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
145 150 155

<210> 89
<211> 1335

<212> DNA

<213> Homosapien

<400> 89

caggccacg tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcagg ttccggata caccctact gaattatcca tgcactgggt gcgacagact 120
cctggaaaag ggcttgaatg gatgggaggt tttgatctg aagatggta aacaatctac 180
gcacagaatg tccaggacag agtcaccatg accgaggaca catctacaga cacagcctac 240
atgaaactga gcagcctgag atctgaggac acggccgtgt attactgtgc aacaaacat 300
ttttggactg gttattatga ctactgggc caggaaacc tggtcaccgt ctccctcagcc 360
tccaccaagg gccccatcggt ctccccctg gcccctgtct ccaggagcac ctccgagagc 420
acagcggccc tgggctgcct ggtcaaggac tacttcccc aaccggtgac ggtgtcgtgg 480
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540
ctctactccc tcagcagcgt ggtgaccgtg ccctccagca acttcggcac ccagacctac 600
acctgcaacg tagatcacaa gcccagcaac accaagtgg acaagacagt tgagcgaaaa 660
tgttgtgtcg agtgcaccacc gtgcccagca ccacctgtgg caggaccgtc agtcttcctc 720
ttccccccaa aacccaagga caccctcatg atctcccgaa cccctgaggt cacgtgcgtg 780
gtggggacg tgagccacga agaccccgag gtccagttca actggtagtgg ggacggcgtg 840
gaggtgcata atgcaagac aaagccacgg gaggagcgt tcaacacgac gttccgtgtg 900
gtcagcgtcc tcaccgttgt gcaccaggac tggctgaacg gcaaggagta caagtgcag 960
gtctccaaca aaggcctccc agccccatc gagaaaaacca tctccaaaac caaagggcag 1020
ccccgagaac cacaggtgta caccctgccc ccattccggg aggagatgac caagaaccag 1080
gtcagcctga cctgcctggt caaaggcttc taccccaagcg acatcgccgt ggagtggag 1140
agcaatgggc agccggagaa caactacaag accacaccc ccatgctggc ctccgacggc 1200
tccttcttcc tctacagcaa gctcaccgtg gacaagagca ggtggcagca ggggaacgtc 1260
ttctcatgtct cctgtatgca tgaggctctg cacaaccact acacgcagaa gagcctctcc 1320
ctgtctccgg gtaaa 1335

<210> 90

<211> 445

<212> PRT

<213> Homosapien

<400> 90

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Thr Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Asp Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Thr Asn Asp Phe Trp Thr Gly Tyr Asp Tyr Trp Gly Gln Gly
100 105 110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115 120 125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130 135 140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145 150 155 160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165 170 175
Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser

	180	185	190
Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro			
195	200	205	
Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu			
210	215	220	
Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu			
225	230	235	240
Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu			
245	250	255	
Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln			
260	265	270	
Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys			
275	280	285	
Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu			
290	295	300	
Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys			
305	310	315	320
Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys			
325	330	335	
Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser			
340	345	350	
Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys			
355	360	365	
Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln			
370	375	380	
Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly			
385	390	395	400
Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln			
405	410	415	
Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn			
420	425	430	
His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys			
435	440	445	

<210> 91
<211> 660
<212> DNA
<213> Homosapien

<400> 91

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gacatcgta tgaccaggc tccagactcc ctggctgtgt ctctggcgaa gagggccacc 60
atcaactgca agtccaggcca gagtgttta tacagctcca acaaataagaa ctacttagtt 120
tggtaccaggc agaaaaccagg acagcctcct aagacgctca ttactgggc atctacccgg 180
gaatccgggg tccctgaccc attcaagtggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtggg gtttattact gtcaacaata ttataactgt 300
ccgtggacgt tcggccaaagg gaccaagggtg gaaatcaagc gaactgtggc tgcaccatct 360
gtcttcatct tccccccatc tggatggcag ttgaaatctg gaactgcctc tggatgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtggta taaccccctc 480
caatcggtt actcccaagg gagggtcaca gagcaggaca gcaaggacag cacctacagc 540
ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaaagt ctacccctgc 600
gaagtcaccc atcaggccct gagctcgccc gtcacaaaaga gcttcaacag gggagagtgt 660

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<210> 92
<211> 220
<212> PRT

<213> Homosapien

<400> 92
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45
Pro Pro Lys Thr Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Ser Ser Leu Gln Ala Glu Asp Val Gly Val Tyr Tyr Cys Gln Gln
85 90 95
Tyr Tyr Thr Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
100 105 110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
145 150 155 160
Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
165 170 175
Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
180 185 190
Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
195 200 205
Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215 220

<210> 93

<211> 560

<212> DNA

<213> Homosapien

<400> 93

caggtgcagc tgcaggagtc gggcccagga ctggtaaagc cgtcacagac cctgtccctc 60
acctgcactg tctctggtgg ctccatcagc agtggtggtt actactggag ctggatccgc 120
cagcacccag ggaaggccct ggagtggatt gggtacatct attacagtgg gagcacctac 180
tacaaccctgt ccctcaagag tcgagttatc atatcaatcg acacgtctaa gaaccagtcc 240
tccctgaagc tgacctctgt gactgccgcg gacacggccg tgattactg tgcgagatca 300
tatagcagct cgtccccact ggttcgaccc ctggggccag ggaaccctgg tcaccgtctc 360
ctcagcttcc accaagggcc catccgttcc cccctggcg ccctgtcca ggagcacctc 420
cgagagcaca gccgcctgg gctgcctggt caaggactac ttccccgaac cggtgacgg 480
gtcgtggAAC tcaggcgccc tgaccagcgg cgtgcacacc ttcccgctg tcctacagtc 540
ctcaggactc tactccctca 560

<210> 94

<211> 186

<212> PRT

<213> Homosapien

<400> 94

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln

1	5	10	15												
Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser	Gly	Gly	Ser	Ile	Ser	Ser	Gly
	20		25									30			
Gly	Tyr	Tyr	Trp	Ser	Trp	Ile	Arg	Gln	His	Pro	Gly	Lys	Gly	Leu	Glu
	35		40									45			
Trp	Ile	Gly	Tyr	Ile	Tyr	Tyr	Ser	Gly	Ser	Thr	Tyr	Tyr	Asn	Pro	Ser
	50		55								60				
Leu	Lys	Ser	Arg	Val	Ile	Ile	Ser	Val	Asp	Thr	Ser	Lys	Asn	Gln	Phe
	65		70							75					80
Ser	Leu	Lys	Leu	Thr	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr
	85		90									95			
Cys	Ala	Arg	Ser	Tyr	Ser	Ser	Ser	Pro	Leu	Val	Arg	Pro	Leu	Gly	
	100		105									110			
Pro	Gly	Asn	Pro	Gly	His	Arg	Leu	Leu	Ser	Phe	His	Gln	Gly	Pro	Ile
	115		120									125			
Arg	Leu	Pro	Pro	Gly	Ala	Leu	Leu	Gln	Glu	His	Leu	Arg	Glu	His	Ser
	130		135								140				
Arg	Pro	Gly	Leu	Pro	Gly	Gln	Gly	Leu	Leu	Pro	Arg	Thr	Gly	Asp	Gly
	145		150							155					160
Val	Val	Glu	Leu	Arg	Arg	Pro	Asp	Gln	Arg	Arg	Ala	His	Leu	Pro	Gly
	165		170									175			
Cys	Pro	Thr	Val	Leu	Arg	Thr	Leu	Leu	Pro						
	180		185												

<210> 95
<211> 458
<212> DNA
<213> Homosapien

<400> 95
gacatccaga tgacctagtc tccatcctcc ctgtctgcat ctgttaggaga cagagtacc 60
atcaattgc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120
gggaaaagccc ctaagcgctt gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggtatc tgggacagaaa ttcaactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt acccattcac tttcggccct 300
gggacccaaag tggatatcaa acgaaactgtg gctgcaccat ctgtcttcat cttccggcca 360
tctgtatgagc agttgaaatc tggaaactgcc tctgttgtgt gcctgctgaa taacttctat 420
cccagagagg ccaaagtaca gtgaaagggtg gataacgc 458

<210> 96
<211> 152
<212> PRT
<213> Homosapien

<400> 96
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
20 25 30
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
35 40 45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Phe

	85	90	95
Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Arg Thr Val Ala Ala			
100	105	110	
Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly			
115	120	125	
Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala			
130	135	140	
Lys Val Gln Trp Lys Val Asp Asn			
145	150		

<210> 97
<211> 559
<212> DNA
<213> Homosapien

<400> 97
caggccatc tggcacgtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
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cctggaaaag ggcttgagtg gatgggaggt tttgatctg aagatggta aacaatctac 180
gcacagaagt tccaggccag agtcaccatg accgaggaca catctacaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagatcgc 300
gagtttggc gtggttattt ctaccactgg ggccaggaa ccctggtcac cgtctcccta 360
gcctccacca agggcccatc ggtttcccc ctggccccc gctccaggag cacctccgag 420
agcacagcgg ccctggctg cctggtcaag gactactcc cccaaaccggg gacgggtgtcg 480
tggaaacttag cgcgtctgac cagcggcgtg cacacccctc cagctgtcct acagtccctca 540
ggactctact ccctcagca 559

<210> 98
<211> 186
<212> PRT
<213> Homosapien

<400> 98
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Thr Asp Arg Glu Phe Trp Ser Gly Tyr Phe Tyr His Trp Gly Gln
100 105 110
Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
115 120 125
Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala
130 135 140
Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
145 150 155 160
Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
165 170 175
Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser

180

185

<210> 99
<211> 491
<212> DNA
<213> Homosapien

<400> 99
gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
atcaactgca agtccagcca gagtgttta tacagctcca acaatgagaaa cttcttagct 120
tggtaccaggc agaaaccagg acagcctcct aaactgctca ttactgggc atctaccgg 180
gaatccgggg tcccagaccg cttcagtgcc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttataatagt 300
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgccacatct 360
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc ttttgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcctcc 480
ccaatcggt a 491

<210> 100
<211> 163
<212> PRT
<213> Homosapien

<400> 100
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30
Ser Asn Asn Glu Asn Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95
Tyr Tyr Asn Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
100 105 110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Ser
145 150 155 160
Pro Ile Gly

<210> 101
<211> 543
<212> DNA
<213> Homosapien

<400> 101
caggtccagc tggcacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcaagg tttccggata caccctcaact gaattatcca tgcactgggt gcgacaggct 120

cctggaaaag ggctttagtg gatgggaggt tttgatcctg aagatggtga aacaatctac 180
 gcacagaagt tccaggccag agtcaccatg accgaggaca catctacaga cacagcctac 240
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacggacgat 300
 ttttggagtg gttattttga ctactggggc cagggAACCC tggtcaccgt ctcctcagcc 360
 tccaccaagg gccccatcggt ctccccctg gcccctgct ccaggagcac ctccgagagc 420
 acagcgcccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcggtgg 480
 aactcaggcg ctctgaccag cgccgtgcac accttcccag ctgtcctaca gtcctcagga 540
 ctt

<210> 102
 <211> 181
 <212> PRT
 <213> Homosapien

<400> 102
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Thr Asp Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
 100 105 110
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
 115 120 125
 Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
 130 135 140
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
 145 150 155 160
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
 165 170 175
 Gln Ser Ser Gly Leu
 180

<210> 103
 <211> 491
 <212> DNA
 <213> Homosapien

<400> 103
 gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggccgaa gagggccacc 60
 atcaactgca agtccagtc gagggtttta tacaggctta acaataagag ctacttagtt 120
 tggtaccaggc agaaactagg acagtctcct aagctgctca ttactgggc atctacccgg 180
 gaatccgggg tccctgaccc attcagtgcc agcgggtctg ggacagattt cacttcacc 240
 atcagcagcc tgcaggctga agatgtggca gtttattatt gtcacaata ttatagtact 300
 ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaacc gaaactgtggc tgcaccatct 360
 gtctcatct tccccccatc tgatgagcag ttgaaatctg gaaactgcctc tgggtgtgc 420
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacccctc 480
 ccaatcggtt a

<210> 104
 <211> 163
 <212> PRT
 <213> Homosapien

<400> 104
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Arg
 20 25 30
 Ser Asn Asn Lys Ser Tyr Leu Val Trp Tyr Gln Gln Lys Leu Gly Gln
 35 40 45
 Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60
 Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95
 Tyr Tyr Ser Thr Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100 105 110
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
 115 120 125
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 130 135 140
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 145 150 155 160
 Pro Ile Gly

<210> 105
 <211> 499
 <212> DNA
 <213> Homosapien

<400> 105
 caggccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
 tcctgcagg tttccggata caccctcaact gaattatcca tgcactgggt gcgacaggct 120
 cctggaaaag ggcttgagt gatgggaggt tttgatcctg aagatggtga aacaatctac 180
 gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagacgat 300
 ttttggagtg gttattttga ctactggggc cagggAACCC tggtcaccgt ctcctcagcc 360
 tccaccaagg gcccattcggt cttccccctg ggcgcctgct ccaggagcac ctccgagagc 420
 acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480
 aactcaggcg ctctgacca 499

<210> 106
 <211> 166
 <212> PRT
 <213> Homosapien

<400> 106
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met

35	40	45		
Gly	Gly	Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe		
50	55	60		
Gln	Gly	Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr		
65	70	75	80	
Met	Glu	Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys		
	85	90	95	
Ala	Thr Asp Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly			
	100	105	110	
Thr	Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe			
	115	120	125	
Pro	Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu			
	130	135	140	
Gly	Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp			
	145	150	155	160
Asn	Ser Gly Ala Leu Thr			
	165			

<210> 107

<211> 448

<212> DNA

<213> Homosapien

<400> 107

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gacatcgta tgaccaggc tccagactcc ctggctgtgt ctctggcgaa gaggccacc 60
atcaactgca agtccaggcca gagtgttta tacagctcca acaataagaa ctacttagtt 120
tggtaccaggc agaaaccagg acaggctccct aagctgctca ttactgggc atctacccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cacttcacc 240
atcagcagcc tgcaggctga agatgtggca gtatttact gtcagcaata ttatagtcct 300
acgtggacgt tcggccaagg gaccaagggtg gaaatcaaacc gaaactgtggc tgcaccatct 360
gtcttcatct tccgcacatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420
ctgctgaata acttctatcc cagagagg                                448

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<210> 108

<211> 149

<212> PRT

<213> Homosapien

<400> 108

Asp	Ile	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu	Ala	Val	Ser	Leu	Gly
1															15
Glu	Arg	Ala	Thr	Ile	Asn	Cys	Lys	Ser	Ser	Gln	Ser	Val	Leu	Tyr	Ser
															30
Ser	Asn	Asn	Asn	Tyr	Leu	Val	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	
															45
Pro	Pro	Lys	Leu	Ile	Tyr	Trp	Ala	Ser	Thr	Arg	Glu	Ser	Gly	Val	
															60
Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr		
															80
Ile	Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln
															95
Tyr	Tyr	Ser	Pro	Thr	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile
															110
Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp
															125
Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn

130 135 140
Phe Tyr Pro Arg Glu
145

<210> 109
<211> 540
<212> DNA
<213> Homosapien

<400> 109
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcagg tttccggata caccctact gaattatcca tgcactgggt ggcacaggct 120
cctggaaaag ggcttgagt gatgggaggt tttgatctg aagatggta aacaatctac 180
gcacagaagt tccaggccag agtcaccatg accgaggaca catctacaga cacaggctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacggacgat 300
tttggagtg gttatgttca ctactgggc cagggAACCC tggtcaccgt ctccctcagcc 360
tccaccaagg gccccatcggt ctccccctg gcccctgct ccaggagcac ctccgagagc 420
acagcggccc tgggctgcct ggtcaaggac tactccccg aaccgggtgac ggtgtcgtgg 480
aactcaggcg ctctgaccag cggcgtgac accttcccag ctgtcctaca gtcctcagga 540

<210> 110
<211> 180
<212> PRT
<213> Homosapien

<400> 110
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Thr Asp Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
100 105 110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115 120 125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130 135 140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145 150 155 160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165 170 175
Gln Ser Ser Gly
180

<210> 111
<211> 478
<212> DNA

<213> Homosapien

<400> 111

gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggcgaa gagggccacc 60
atcaactgca agtccagcca gagtgttta tacagctcca acaataagaa ctacttagct 120
tggtaccaggc agaaaaccagg acagcctcct aagctgctca ttactggac atctacccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg tgacagatt cacttcacc 240
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagaata ttatagttct 300
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgacccatct 360
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcct 478

<210> 112

<211> 159

<212> PRT

<213> Homosapien

<400> 112

Asp	Ile	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu	Ala	Val	Ser	Leu	Gly
1					5				10					15	
Glu	Arg	Ala	Thr	Ile	Asn	Cys	Lys	Ser	Ser	Gln	Ser	Val	Leu	Tyr	Ser
							20		25					30	
Ser	Asn	Asn	Lys	Asn	Tyr	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln
						35			40				45		
Pro	Pro	Lys	Leu	Leu	Ile	Tyr	Trp	Thr	Ser	Thr	Arg	Glu	Ser	Gly	Val
						50			55			60			
Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Val	Thr	Asp	Phe	Thr	Leu	Thr
						65			70			75			80
Ile	Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln
						85			90				95		
Tyr	Tyr	Ser	Ser	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile
						100			105				110		
Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp
						115			120			125			
Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn
						130			135			140			
Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	
						145			150			155			

<210> 113

<211> 542

<212> DNA

<213> Homosapien

<400> 113

caggtccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcaagg tttccggata caccctcagt gaattatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttggatg gatggggaggt tttgatcctg aagatggtga aacaatctac 180
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt ttactgtgc aacaagagg 300
gaatatagtg gctactttga ctactggggc cagggAACCC tggtcaccgt ctcctcagcc 360
tccaccaagg gcccattcggt cttccccctg gcgccctgct ccaggagcac ctccgagagc 420
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540
ct

<210> 114
<211> 180
<212> PRT
<213> Homosapien

<400> 114
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Ser Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Phe Tyr Cys
85 90 95
Ala Thr Lys Arg Glu Tyr Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
100 105 110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
115 120 125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130 135 140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
145 150 155 160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165 170 175
Gln Ser Ser Gly
180

<210> 115
<211> 477
<212> DNA
<213> Homosapien

<400> 115
gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
atcaactgca agtccagcca gagtgttta tacagctcca acagtaagaa ctacttagct 120
tggttccagc agaaaaccagg acagcctcct aagctgctca ttactgggc atctaccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcagccgcc tgcaggctga agatgtggca gtttattcct gtcagcaata ttttattact 300
ccgtggacgt tcggccaaagg gaccaagggtg gaactcaaac gaactgtggc tgcaccatct 360
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc ttttgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcc 477

<210> 116
<211> 159
<212> PRT
<213> Homosapien

<400> 116
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30

Ser	Asn	Ser	Lys	Asn	Tyr	Leu	Ala	Trp	Phe	Gln	Gln	Lys	Pro	Gly	Gln
35					40							45			
Pro	Pro	Lys	Leu	Leu	Ile	Tyr	Trp	Ala	Ser	Thr	Arg	Glu	Ser	Gly	Val
50					55						60				
Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr
65				70				75			80				
Ile	Ser	Arg	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Ser	Cys	Gln	Gln
				85				90			95				
Tyr	Phe	Ile	Thr	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Leu
					100			105			110				
Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp
					115			120			125				
Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn
					130			135			140				
Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	
					145			150			155				

<210> 117
<211> 459
<212> DNA
<213> Homosapien

<400> 117
caggtgcagc ctgagcagtc gggccaggga ctggtaagc cctcgacagac cctctcaactc 60
acctgtgcct tctccgggaa cagtgtctct agcaacatgt ctgcttgaa ctggatcagg 120
cagtccccctt cgagaggcct tgagtggctg ggaaggacat actacaggtc caagtggat 180
agtgtatcatg cagtatctgt gagaagtcga ataaccatct acccagacac atccaagaac 240
cagttctccc tgcagctgaa ctctgtact cccgaggaca cggctgtgta ttactgtgca 300
agagatcgga ttagtgggac ctatgtcggt atggacgtct ggggccaagg gaccacggc 360
accgtctccct cagcctccac caagggccca tcggcttcc ccctggcgcc cctgctccag 420
gagcacctcc gagagcacag cggccctggg ctgcctggc 459

<210> 118
<211> 153
<212> PRT
<213> Homosapien

<400> 118
Gln Val Gln Pro Glu Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
1 5 10 15
Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn
20 25 30
Ser Ala Ala Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu
35 40 45
Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr Ser Asp His Ala
50 55 60
Val Ser Val Arg Ser Arg Ile Thr Ile Tyr Pro Asp Thr Ser Lys Asn
65 70 75 80
Gln Phe Ser Leu Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val
85 90 95
Tyr Tyr Cys Ala Arg Asp Arg Ile Ser Gly Thr Tyr Val Gly Met Asp
100 105 110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys
115 120 125
Gly Pro Ser Val Phe Pro Leu Ala Pro Leu Leu Gln Glu His Leu Arg
130 135 140

Glu His Ser Gly Pro Gly Leu Pro Gly
145 150

<210> 119
<211> 526
<212> DNA
<213> Homosapien

<400> 119
ccagctcagc tcctgggct gctaatgctc tgggtccctg gatccaatga ggatattgtg 60
atgaccaggc ctccactctc cctgccccgtc acccctggag agccggcctc catctcctgc 120
aggtagtctc agagccttgg gatggaaaca cctatggta ctggtacctg 180
cagaagccag ggcagtctcc acagctcctg atctatacgc ttcccttcg ggcctctgga 240
gtcccagaca ggttcagtgg cagtggtca ggcactgatt tcacactgac aatcagcagg 300
gtggaggctg aggatgttgg agtttattac tgcatgcaac gtatagagtt tccttcact 360
ttccggcgag ggaccaaggt ggagatcaa cgaactgtgg ctgcaccatc tgtcttcattc 420
ttcccgccat ctgatgagca gttaaaatct ggaactgcct ctgttgtgtg cctgctgaat 480
aacttctatc ccagagaggc caaagtacag tggaaagggtgg ataacg 526

<210> 120
<211> 175
<212> PRT
<213> Homosapien

<400> 120
Pro Ala Gln Leu Leu Gly Leu Leu Met Leu Trp Val Pro Gly Ser Asn
1 5 10 15
Glu Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Thr Pro
20 25 30
Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Asp
35 40 45
Ser Asp Asp Gly Asn Thr Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly
50 55 60
Gln Ser Pro Gln Leu Leu Ile Tyr Thr Leu Ser Phe Arg Ala Ser Gly
65 70 75 80
Val Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu
85 90 95
Thr Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met
100 105 110
Gln Arg Ile Glu Phe Pro Leu Thr Phe Gly Gly Thr Lys Val Glu
115 120 125
Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
130 135 140
Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn
145 150 155 160
Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn
165 170 175

<210> 121
<211> 499
<212> DNA
<213> Homosapien

<400> 121
caggccagg tggtagtc tggggctgag gtgaagaacc ctggggcctc agtgaaggc 60

tcctgcaagg tttccggatc caccctcaact gaattatcca tgcactgggt gcgacaggct 120
 cctggaaaag ggcttgagt gatgggaggt tttgatctg aagatggta aacaatctac 180
 gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagtctac 240
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccaacgat 300
 ttttggagt gttatggta ctactggggc cagggAACCC ttgtcaccgt ctccctcagcc 360
 tccaccaagg gcccattcggt ctccccctg gcgcctgtgt ccaggagcac ctccgagagc 420
 acagcggccc tgggctgcct ggtcaaggac tactccccg aaccggtgac ggtgtcgtgg 480
 aactcaggcg ctctgacca 499

<210> 122
 <211> 166
 <212> PRT
 <213> Homosapien

<400> 122
 Gln Val Gln Val Val Gln Ser Gly Ala Glu Val Lys Asn Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Ser Thr Leu Thr Glu Leu
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Val Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly
 100 105 110
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
 115 120 125
 Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
 130 135 140
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
 145 150 155 160
 Asn Ser Gly Ala Leu Thr
 165

<210> 123
 <211> 536
 <212> DNA
 <213> Homosapien

<400> 123
 caggcttca tttctctgtt gctctggatc tctgatgtct atggggacat cgtgatgacc 60
 cagtcctccag actccctggc tgggtctctg ggcgagaggg ccaccatcac ctgcaagtcc 120
 agccagactg ttttatacag ctccaacaat aagaactact tagtttgta tcagcagaaa 180
 tcaggacagc ctcctaagct gctcattcac tggcatcta tccggaaatc cgggtccct 240
 gaccgattca gtggcagcgg gtcgggaca gattcacgc tcaccatcag cagcctgcag 300
 gctgaagatg tggcagtttta ttactgtcag caatattata gtgtccgtg gacgttcggc 360
 caagggacca aggtggaaat caaacgaact gtggctgcac catctgtctt catctcccg 420
 ccatctgatg agcagttgaa atctgaaact gcctctgtt tttgcctgct gaataacttc 480
 tatccccagag aggccaaagt acagtggaaag gtggataacg cccttccaaat cgggta 536

<210> 124
 <211> 178

<212> PRT
<213> Homosapien

<400> 124

Gln	Val	Phe	Ile	Ser	Leu	Leu	Leu	Trp	Ile	Ser	Asp	Val	Tyr	Gly	Asp
1					5					10					15
Ile	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu	Ala	Val	Ser	Leu	Gly	Glu
						20			25					30	
Arg	Ala	Thr	Ile	Thr	Cys	Lys	Ser	Ser	Gln	Thr	Val	Leu	Tyr	Ser	Ser
						35		40				45			
Asn	Asn	Lys	Asn	Tyr	Leu	Val	Trp	Tyr	Gln	Gln	Lys	Ser	Gly	Gln	Pro
						50		55			60				
Pro	Lys	Leu	Leu	Ile	His	Trp	Ala	Ser	Ile	Arg	Glu	Ser	Gly	Val	Pro
						65		70		75				80	
Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile
						85			90			95			
Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Tyr
						100			105			110			
Tyr	Ser	Ser	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys
						115		120			125				
Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu
						130		135			140				
Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe
						145		150			155				160
Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Pro
						165			170			175			
Ile	Gly														

<210> 125
<211> 414
<212> DNA
<213> Homosapien

<400> 125

caggtgcagg ctgagcagtc gggccaggaa ctggtaaagc cctcgccagac cctctcaactc 60
acctgtgccca tctccgggaa cagtgtctct agctacagtg ctgcattggaa ctggatcagg 120
cagtcccctt cgagaggcct tgagtggctg ggaaggacat actacaggc tc caagtggtat 180
agtatcatg cagtatctgt gagaagtgcgataaaccatct acccagacac atccaagaac 240
cagttctccc tgcagctgaa ctctgtgact cccgaggaca cggctgtgta ttactgtgca 300
agagatcgga ttagtggac ctatgtcggt atggacgtct gggcccaagg gaccacggc 360
accgtctcct cagcctccac caagggcccc atcggtcttc cccctggccc cctc 414

<210> 126
<211> 138
<212> PRT
<213> Homosapien

<400> 126

Gln	Val	Gln	Ala	Glu	Gln	Ser	Gly	Pro	Gly	Leu	Val	Lys	Pro	Ser	Gln
1					5				10				15		
Thr	Leu	Ser	Leu	Thr	Cys	Ala	Ile	Ser	Gly	Asp	Ser	Val	Ser	Ser	Tyr
						20			25			30			
Ser	Ala	Ala	Trp	Asn	Trp	Ile	Arg	Gln	Ser	Pro	Ser	Arg	Gly	Leu	Glu
						35			40			45			
Trp	Leu	Gly	Arg	Thr	Tyr	Tyr	Arg	Ser	Lys	Trp	Tyr	Ser	Asp	His	Ala

50	55	60
Val Ser Val Arg Ser Arg Ile Thr Ile Tyr Pro Asp Thr Ser Lys Asn		
65	70	75
Gln Phe Ser Leu Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val		80
85	90	95
Tyr Tyr Cys Ala Arg Asp Arg Ile Ser Gly Thr Tyr Val Gly Met Asp		
100	105	110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys		
115	120	125
Gly Pro Ile Gly Leu Pro Pro Gly Pro Leu		
130	135	

<210> 127
<211> 514
<212> DNA
<213> Homosapien

<400> 127
gtcttcattt ctctgttgct ctggatctct ggtgcctacg gggacatcgt gatgaccagg 60
tctccagact ccctggctgt gtctctggc gagagggca ccatcaactg caagtccagc 120
cagagtgtt tatacaggta caacaataag aactacatag tttggtagcca gcagaaacca 180
gggcagcctc ctaagttgct catttactgg acatctaccc ggaatccgg ggtccctgac 240
cgattcagtg gcagcgggtc tggAACAGAT ttcaacttca ctagtca cttgcaggct 300
gaagatgtgg cagtttata ctgtcagaa tatTTAGTT ctccgtggac gttcggccaa 360
gggaccAAAG tggACATCAA acgAACTGTG gctgcaccat ctgtcttcat cttccggcca 420
tctgtatgac agttgaaatc tggAACTGCC tctgttgtgt gctgtgtgaa taacttctat 480
cccagagagg ccaaagtaca gtggaaagggtg gata 514

<210> 128
<211> 171
<212> PRT
<213> Homosapien

<400> 128
Val Phe Ile Ser Leu Leu Leu Trp Ile Ser Gly Ala Tyr Gly Asp Ile
1 5 10 15
Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu Arg
20 25 30
Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser Ser Asn
35 40 45
Asn Lys Asn Tyr Ile Val Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
50 55 60
Lys Leu Leu Ile Tyr Trp Thr Ser Thr Arg Glu Ser Gly Val Pro Asp
65 70 75 80
Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
85 90 95
Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Phe
100 105 110
Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys Arg
115 120 125
Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
130 135 140
Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr
145 150 155 160
Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp
165 170

<210> 129
 <211> 444
 <212> DNA
 <213> Homosapien

<400> 129
 cagtcgggtc caggacttgtt gaagccctcg cagaccctct cactcacctg tgccatctcc 60
 ggggacagtgc tctctagcaa cagtgtgtct tggaaactgga tcagggcagtc cccttcgaga 120
 ggccttgagt ggctggaaag gacatactac aggtccaagt ggtatagtga tcatgcagta 180
 tctgtgagaa gtcgaataac catctaccca gacacatcca agaaccagt ctccctgcag 240
 ctgaactctg tgactcccgaa ggacacggct gtgtattact gtgcaagaga tcggattagt 300
 gggacctatg tcggtatgga cgtctggggc caagggacca cgttcaccgt ctcctcagcc 360
 tccaccaagg gccccatcggtt cttcccccgt gcgccttcgc tccaggagca cctccgagag 420
 cacagcggcc ctgggctgccc tggc 444

<210> 130
 <211> 148
 <212> PRT
 <213> Homosapien

<400> 130
 Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln Thr Leu Ser Leu Thr
 1 5 10 15
 Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn Ser Ala Ala Trp Asn
 20 25 30
 Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu Trp Leu Gly Arg Thr
 35 40 45
 Tyr Tyr Arg Ser Lys Trp Tyr Ser Asp His Ala Val Ser Val Arg Ser
 50 55 60
 Arg Ile Thr Ile Tyr Pro Asp Thr Ser Lys Asn Gln Phe Ser Leu Gln
 65 70 75 80
 Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
 85 90 95
 Asp Arg Ile Ser Gly Thr Tyr Val Gly Met Asp Val Trp Gly Gln Gly
 100 105 110
 Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
 115 120 125
 Pro Leu Ala Pro Leu Leu Gln Glu His Leu Arg Glu His Ser Gly Pro
 130 135 140
 Gly Leu Pro Gly
 145

<210> 131
 <211> 505
 <212> DNA
 <213> Homosapien

<400> 131
 gggctgctaa tgctctggat acctggatcc agtgcagata ttgggatgac ccagactcca 60
 ctctctctgt ccgtcacccc tggacagccg gcctccatct cctgttaagtc tagtcagagc 120
 ctcctgtata gtatggaaa gacctattt tattggtacc tgccagaagcc aggccagcct 180
 ccacaacacc tgatctatga agtttccaaac cggttctctg gagtgccaga taggttcagt 240
 ggcagcgggt ctgggacaga tttcacactg aaaatcagcc gggtggaggc tgatgtatgtt 300
 ggggtttatt actgcatgca aactatacac cttccgctca ctttcggcgg agggaccaag 360

gtggagatcc aacgaactgt ggctgcacca tctgtttca tcttcccgcc atctgatgag 420
cagttgaaat ctggaaactgc ctctgttg tgccctgctga ataacttcta tcccagagag 480
gccaaagtac agtggaaagggt ggata 505

<210> 132
<211> 168
<212> PRT
<213> Homosapien

<400> 132
Gly Leu Leu Met Leu Trp Ile Pro Gly Ser Ser Ala Asp Ile Gly Met
1 5 10 15
Thr Gln Thr Pro Leu Ser Leu Ser Val Thr Pro Gly Gln Pro Ala Ser
20 25 30
Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser Asp Gly Lys Thr
35 40 45
Tyr Leu Tyr Trp Tyr Leu Gln Lys Pro Gly Gln Pro Pro Gln His Leu
50 55 60
Ile Tyr Glu Val Ser Asn Arg Phe Ser Gly Val Pro Asp Arg Phe Ser
65 70 75 80
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu
85 90 95
Ala Asp Asp Val Gly Val Tyr Tyr Cys Met Gln Thr Ile His Leu Pro
100 105 110
Leu Thr Phe Gly Gly Thr Lys Val Glu Ile Gln Arg Thr Val Ala
115 120 125
Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser
130 135 140
Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu
145 150 155 160
Ala Lys Val Gln Trp Lys Val Asp
165

<210> 133
<211> 447
<212> DNA
<213> Homosapien

<400> 133
gagcagtcgg gtccaggact ggtgaagccc tcgcagaccc tctcaactcac ctgtgccatc 60
tccggggaca gtgtctctag caacagtgtct gcttggaaact ggatcaggca gtcccttcg 120
agaggccttg agtggctggg aaggacatac tacaggtcca agtggtatag tggatcatgca 180
gtatctgtga gaagtgcata aaccatctac ccagacacat ccaagaacca gttctccctg 240
cagctgaact ctgtgactcc cgaggacacg gctgtgtatt actgtgcaag agatcggatt 300
agtgggacact atgtcggtat ggacgtctgg ggc当地 aaggga ccacggtcac cgtctccctca 360
gcctccacca agggcccatc ggtttcccc ctggcgcccc tgctccagga gcaccccgaa 420
gagcacagcg gccctgggct gcctggc 447

<210> 134
<211> 149
<212> PRT
<213> Homosapien

<400> 134
Glu Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln Thr Leu Ser Leu
1 5 10 15

Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn Ser Ala Ala Trp
 20 25 30
 Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu Trp Leu Gly Arg
 35 40 45
 Thr Tyr Tyr Arg Ser Lys Trp Tyr Ser Asp His Ala Val Ser Val Arg
 50 55 60
 Ser Arg Ile Thr Ile Tyr Pro Asp Thr Ser Lys Asn Gln Phe Ser Leu
 65 70 75 80
 Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Arg Asp Arg Ile Ser Gly Thr Tyr Val Gly Met Asp Val Trp Gly Gln
 100 105 110
 Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
 115 120 125
 Phe Pro Leu Ala Pro Leu Leu Gln Glu His Leu Arg Glu His Ser Gly
 130 135 140
 Pro Gly Leu Pro Gly
 145

<210> 135
 <211> 520
 <212> DNA
 <213> Homosapien

<400> 135
 caggtcttca tttctctgtt gctctggatc tctgggcct acggggacat cgtgatgacc 60
 cagtctccag actccctggc tgtgtctctg ggcgagaggg ccgccatcaa ctgcaagtcc 120
 agccagactg ttttatacacg ctccaacaat aagaactact tggtttggta ccagcagaaa 180
 ccaggacagc ctcccaagct gctcatttac tgggcatcta cccggaaatc cggggccct 240
 gaccgattca gtggcagcgg gtctgggaca gatttcactc tcaccatca cagcctgcag 300
 gctgaagatg tggcagttt ttactgtcaa caatattata aaagtccgtg gacgttcggc 360
 caagggacca aggtggaaat caaacgaact gtggctgcac catctgtctt catctcccc 420
 ccatctgtatg agcagttgaa atctggaact gcctctgtt tgcctgtct gaataacttc 480
 tatccccagag aggccaaagt acagtggaaag gtggataacg 520

<210> 136
 <211> 173
 <212> PRT
 <213> Homosapien

<400> 136
 Gln Val Phe Ile Ser Leu Leu Trp Ile Ser Gly Ala Tyr Gly Asp
 1 5 10 15
 Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu
 20 25 30
 Arg Ala Ala Ile Asn Cys Lys Ser Ser Gln Thr Val Leu Tyr Ser Ser
 35 40 45
 Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln Pro
 50 55 60
 Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val Pro
 65 70 75 80
 Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
 85 90 95
 Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr
 100 105 110
 Tyr Lys Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys

	115	120	125												
Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu
	130	135								140					
Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe
	145	150								155					160
Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn			
	165							170							

<210> 137
<211> 490
<212> DNA
<213> Homosapien

<400> 137
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60
tcctgcagg tttccggata caccctcaact gaattatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgagt gatgggaggt tttgatcctg aaaatggta aacaatccac 180
gcacagaagt tccagggcag agtcatcatg accgaggaca catctacaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagatcag 300
ggtgatatata gtggctactt tgactgctgg ggccaggaa ccctggtcac cgtctcccta 360
gcttccacca agggcccattc cgtttcccc ctggcgccct gctccaggag cacctccgag 420
agcacagccg ccctgggctg cctggtaag gactacttcc ccgaaccggg gacgggtgtcg 480
tggaactcag 490

<210> 138
<211> 163
<212> PRT
<213> Homosapien

<400> 138
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Gly Phe Asp Pro Glu Asn Gly Glu Thr Ile His Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Ile Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Thr Asp Gln Gly Gly Tyr Ser Gly Tyr Phe Asp Cys Trp Gly Gln
100 105 110
Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
115 120 125
Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala
130 135 140
Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
145 150 155 160
Trp Asn Ser

<210> 139
<211> 540

<212> DNA

<213> Homosapien

<400> 139

agaccaggc cttcatttct ctgttgctct ggatctctgg tgcctacggg gacatcgta 60
tgaccaggc tccagactcc ctggctgtgt ctctggcga gagggccacc atcaactgca 120
agtccagcca gagtatttta tacagctcca ataataagaa ttattttagtt tggtaccagc 180
agaaaccagg acagcctcct aagttgctca tttactggc atctacccgg gaatccgggg 240
tccctgaccg attcagtgcc agccggctcg ggacagattt cactctcacc atcagcagcc 300
tgcaggctga agatgtggca gtttattact gtcagcaata ttatagtagt cctccgacgt 360
tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgccacatct gtcttcatct 420
tcccgcacatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc ctgctgaata 480
acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcctc caatccggta 540

<210> 140

<211> 179

<212> PRT

<213> Homosapien

<400> 140

Thr Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser Gly Ala Tyr Gly
1 5 10 15
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
20 25 30
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Ile Leu Tyr Ser
35 40 45
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln
50 55 60
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
65 70 75 80
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
85 90 95
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
100 105 110
Tyr Tyr Ser Ser Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
115 120 125
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
130 135 140
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
145 150 155 160
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
165 170 175
Gln Ser Gly

<210> 141

<211> 518

<212> DNA

<213> Homosapien

<400> 141

accatggagt ggacctggag ggtcctttc ttgggtggcag cagctacagg cacccacgcc 60
caggccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 120
tcctgcaagg ttccggata caccctact gaattatcca tgcactgggt gcgcacaggct 180
cctggaaaag ggcttgatgt gatgggaggtt ttgtatctg aagatggta aacaatctac 240

gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 300
atggagctga gtagcctgag aactgaggac acggccgtgt attactgtac aacggacgat 360
ttttggagtg gttattttga ctactggggc cagggAACCC tggtcaccgt ctcctcagcc 420
tccaccaagg gcccatcggt ctccccctg gcgcctgct ccaggagcac ctccgagagc 480
acagcggcct gggctgcctg gtcaaggact acttcccc 518

<210> 142
<211> 172
<212> PRT
<213> Homosapien

<400> 142
Thr Met Glu Trp Thr Trp Arg Val Leu Phe Leu Val Ala Ala Ala Thr
1 5 10 15
Gly Thr His Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys
20 25 30
Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr
35 40 45
Leu Thr Glu Leu Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly
50 55 60
Leu Glu Trp Met Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr
65 70 75 80
Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr
85 90 95
Asp Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Thr Glu Asp Thr Ala
100 105 110
Val Tyr Tyr Cys Thr Thr Asp Asp Phe Trp Ser Gly Tyr Phe Asp Tyr
115 120 125
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly
130 135 140
Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser
145 150 155 160
Thr Ala Ala Trp Ala Ala Trp Ser Arg Thr Thr Ser
165 170

<210> 143
<211> 519
<212> DNA
<213> Homosapien

<400> 143
caggtcttca ttctctgtt gctctggatc tctgggcct acggggacat cgtgatgacc 60
cagtctccag actccctggc tgtgtctctg ggcgagaggg ccaccatcaa ctgcaagtcc 120
agccagagtc ttttatacag ctccaaaaat aagaactatt tagttggta ccagcagaaa 180
ccaggacagc ctccaaagct gctcattaac tgggcatacta cccggaaatc cggggccct 240
gaccgattca gtggcagcgg gtctggaca gatttcactc tcaccatca gacgcctgcag 300
gctgaagatg tggcagtttta ttactgtcag caatattata gttctccgtg gacggtcggc 360
caagggacca aggtggaaat caaacgaact gtggctgcac catctgtctt catctcccg 420
ccatctgtatg agcagttgaa atctggaaact gcctctgtt tggtgcctgct gaataacttc 480
tatcccagag aggcaaaagta cagtgaaagg tggataacgc 519

<210> 144
<211> 173
<212> PRT
<213> Homosapien

<400> 144

Gln	Val	Phe	Ile	Ser	Leu	Leu	Leu	Trp	Ile	Ser	Gly	Ala	Tyr	Gly	Asp
1					5					10					15
Ile	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu	Ala	Val	Ser	Leu	Gly	Glu
						20			25					30	
Arg	Ala	Thr	Ile	Asn	Cys	Lys	Ser	Ser	Gln	Ser	Leu	Leu	Tyr	Ser	Ser
						35			40					45	
Lys	Asn	Lys	Asn	Tyr	Leu	Val	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Pro
						50			55			60			
Pro	Lys	Leu	Leu	Ile	Asn	Trp	Ala	Ser	Thr	Arg	Glu	Ser	Gly	Val	Pro
						65			70		75			80	
Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile
						85			90					95	
Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Tyr
						100			105				110		
Tyr	Ser	Ser	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys
						115			120				125		
Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu
						130			135			140			
Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe
						145			150		155			160	
Tyr	Pro	Arg	Glu	Ala	Lys	Tyr	Ser	Gly	Arg	Trp	Ile	Arg			
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<210> 145
<211> 436
<212> DNA
<213> Homosapien

<400> 145

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aaggccgat	tcaccatctc	cagagacact	tccaagaaca	cgctgtatct	gcaaatgaac	240
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tactacggta	tggacgtctg	gggccaaggg	accacgtca	ccgtctcctc	agcctccacc	360
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<210> 146
<211> 145
<212> PRT
<213> Homosapien

<400> 146

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Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Ser	Tyr	Gly	Met	His	Trp
						20			25				30		
Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	Ala	Val	Ile	Trp
						35			40				45		
Tyr	Asp	Gly	Asn	Asn	Lys	Tyr	Tyr	Ala	Asp	Ser	Val	Lys	Gly	Arg	Phe
						50			55			60			
Thr	Ile	Ser	Arg	Asp	Thr	Ser	Lys	Asn	Thr	Leu	Tyr	Leu	Gln	Met	Asn
						65			70		75			80	
Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Arg	Asp	Ser

	85	90	95
Ser Ser Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr			
100	105	110	
Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu			
115	120	125	
Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys			
130	135	140	
Leu			
145			

<210> 147
<211> 428
<212> DNA
<213> Homosapien

<400> 147
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agcagtggca gcattgcag caactatgtg cagtggttcc agcagcgccc gggcagttcc 180
cccaccactg taatctatga ggatgaccaa agaccctctg gggtccctga tcggttctgt 240
ggctccatcg acagctctc caactctgcc tccctcacca tctctggact gaggactgag 300
gacgaggctg actactactg tcagtcttat gatagcagca atcatgtgg attcggcgga 360
gggaccaagc tgaccgtcct aggtcagccc aaggctgccc cctcggtcac tctgtcccg 420
ccctccctc 428

<210> 148
<211> 142
<212> PRT
<213> Homosapien

<400> 148
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Asn Phe Met Leu Thr Gln Pro His Ser Val Ser Glu Ser Pro Gly Lys
20 25 30
Thr Val Thr Ile Ser Cys Thr Arg Ser Ser Gly Ser Ile Ala Ser Asn
35 40 45
Tyr Val Gln Trp Phe Gln Gln Arg Pro Gly Ser Ser Pro Thr Thr Val
50 55 60
Ile Tyr Glu Asp Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Cys
65 70 75 80
Gly Ser Ile Asp Ser Ser Ser Asn Ser Ala Ser Leu Thr Ile Ser Gly
85 90 95
Leu Arg Thr Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser
100 105 110
Ser Asn His Val Val Phe Gly Gly Thr Lys Leu Thr Val Leu Gly
115 120 125
Gln Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser
130 135 140

<210> 149
<211> 76
<212> PRT
<213> Homosapien

<400> 149

Gln Pro Asp Ala Ile Asn Ala Pro Val Thr Cys Cys Tyr Asn Phe Thr
1 5 10 15
Asn Arg Lys Ile Ser Val Gln Arg Leu Ala Ser Tyr Arg Arg Ile Thr
20 25 30
Ser Ser Lys Cys Pro Lys Glu Ala Val Ile Phe Lys Thr Ile Val Ala
35 40 45
Lys Glu Ile Cys Ala Asp Pro Lys Gln Lys Trp Val Gln Asp Ser Met
50 55 60
Asp His Leu Asp Lys Gln Thr Gln Thr Pro Lys Thr
65 70 75

<210> 150

<211> 16

<212> PRT

<213> Homosapien

<400> 150

Ile Ser Val Gln Arg Leu Ala Ser Tyr Arg Arg Ile Thr Ser Ser Lys
1 5 10 15